



Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137



Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-1216-21-F

Plant ID: 1216

Effective Date: 04/29/2021

Expiration Date: 04/30/2026

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Source: **BAE Systems**
163 Rochester Drive
Louisville, KY 40214

Owner: **BAE Systems Land & Armaments L.P.**
2000 North 15th Street 11th Floor
Arlington, VA 22201

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve (12) months and no later than ninety (90) days prior to the expiration date.

Emission limitations to qualify for non-major status:

Pollutant:	PM/PM ₁₀	VOC	Single HAP	Total HAPs
Tons/year:	25	25	5	12.5

Application No.: See **Application and Related Documents** table.

Public Notice Date: 01/27/2021

DocuSigned by:

BDAE2992DEB24D7...

Permit writer: Shannon Hosey

Air Pollution Control Officer
4/29/2021

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FEDDOOP Permit Revisions/Changes

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
142-97-TV	04/23/00	08/02/00	Initial	Entire Permit
142-97-TV (R1)	N/A	01/14/03	Admin.	Emission Unit PE1-12
142-97-TV (R2)	12/13/12	03/26/13	Renew./ Admin.	Entire Permit/Cover Page
142-97-TV (R3)	N/A	07/17/13	Admin.	Emission Unit U17, IA4
142-97-TV (R4)	N/A	01/22/14	Admin.	Emission Unit U8, Table of Applicable Regulations, Emission Unit U11 Description
142-97-TV (R5)	N/A	12/16/16	Admin.	Emission Units 12, 16, 17 and IA5 (U11 became IA5)
O-1216-21-F	01/27/21	04/29/21	Renew.	Reclassifying to a FEDDOOP exempt from STAR; incorporating one VPM paint/wash booth and one VPM blast booth. Welding emission unit re-designated as IA6.

Construction Permit Summary

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Permit No.	Issue Date	Description
29-10-C(R2)	10/24/2016	EU U16, EP E44, JBI front air flow spray booth model T-25- WSB-S for coating miscellaneous metal parts and non-metal parts
C-1216-1000-15-V	12/17/2015	<p>EU U17, EP E12, Blast-It-All model 122010 blast booth (1,417 lb/hr) with glass bead blasting media, coal slag blasting media, or aluminum oxide blasting media for surface preparation of miscellaneous metal parts controlled by a baghouse (C12).</p> <p>EU U17, EP E45 Hoffman blast booth (1,097 lb/hr) that can use either glass bead blasting media, coal slag blasting media, or aluminum oxide blasting media for surface preparation of miscellaneous metal parts and controlled by a Donaldson Torit baghouse model HDFT2-12 (C45).</p> <p>EU U17, EP E42, JBI model BE-25-WSB-S blasting booth (1,850 lb/hr) that can use either coal slag blasting media or aluminum oxide blasting media for surface preparation of miscellaneous metal parts and controlled by a JBI model 60-10- 3 baghouse (C42) and EU U12, EP E43, Cycloblast Dry Honer model 4836-F blasting cabinet (100 lb/hr) with filters.</p>

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Permit No.	Issue Date	Description
C-1216-1004-16-V	08/31/2016	EU U12, EP E39a, Trinco shot blast cabinet (268 lb/hr) with aluminum oxide blast media for surface preparation of miscellaneous metal parts controlled filter (C39a).
C-1216-1006-18-F	10/02/18	EU U18, EP E47, one (1) paint/wash booth, make Blast One, for coating metal and non-metal parts controlled by filters for production of new Virginia Payload Module parts; and EU U19, EP E47, one (1) abrasive blast booth, make Blast One, rated capacity 700 lb/hr, using aluminum oxide, garnet, or glass bead as abrasive media for production of new Virginia Payload Module parts.
C-1216-1006-18-F(R1)	10/31/19	Renewal of C-1216-1006-18-F for one year
C-1216-1006-18-F(R2)	10/26/20	Renewal of C-1216-1006-18-F for one year

Application and Related Documents

Document Number	Date Received	Description
66942	09/11/2014	Application for U16 E44 – JBI Paint Booth
73958	10/16/2015	Potential to Emit for IA5 (insignificant activity)
72287	06/26/2015	STAR Environmental Acceptability Demonstration Revision
78030	06/26/2016	Application for U12 E39a – Trinco shot blast cabinet
88726	10/30/2017	Title V permit renewal application and SDS sheets
89425	12/07/2017	Renewal Deficiency letter from the District to the source requested for revised PTE and EA demonstration calculations
89997	01/09/2018	Revised confidential PTE and EA demonstration calculations
90264	01/30/2018	Revised confidential Title V permit renewal application
90266	01/30/2018	Revised public Title V permit renewal application
90270	01/31/2018	Application completeness letter for the Title V renewal application
92601	06/14/2018	Public and confidential FEDOOP permit application and PTE calculation
93149	07/16/2018	Public and confidential construction permit application and PTE calculation for VPM paint and blast booths
97140	02/19/2019	Source notification of de-activation of plating shop tanks 106 and 108

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Document Number	Date Received	Description
115099	09/05/2019	Application deeming welding an IA
161181	07/30/2020	Source notification of removal of mechanical polishing equipment in plating shop and conversion of gasoline tank (IA) to diesel
175774	10/22/2020	Source notification of removal of tanks designated as EP IE2-IE8 in EU IA1
177912	11/19/2020	Source informal comments
194311	02/26/2021	Source formal comments and Application AP-100P
198912	03/10/2021	Public VPM Construction Permit Cancellation
198911	03/10/2021	Confidential VPM Construction Permit Cancellation
210493	04/07/2021	Permit clarification for EU U3

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Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors, published by U.S.EPA</i>
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
PM _{2.5}	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

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Preamble

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of annual fees is not made. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.
2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable, and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.
3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.
4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-O.
5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.
6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.
7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result

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in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.

8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit. The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or anticipated noncompliance shall not alter any permit requirement.
9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 10 tons per year, or such lesser quantity as the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 25 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in Section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.
10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 100 tons per year of any regulated pollutant, including particulate matter, PM₁₀, PM_{2.5}, sulfur dioxide, carbon monoxide, nitrogen oxides, lead, hydrogen sulfide, gaseous fluorides, total fluorides, or Volatile Organic Compounds (VOC); any pollutant subject to any standard in District Regulation 7.02; or any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA. Fugitive emissions shall be included in these limits for source categories listed in District Regulation 2.16.
11. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
12. Unless specified elsewhere in this permit, the owner or operator shall submit semi-annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All semi-annual compliance reports shall include the following per Regulation 2.17, section 3.5.
 - A certification statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete", and
 - The signature and title of a responsible official of the company.

The compliance reports shall be submitted on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1st through June 30th	August 30 th
July 1 st through December 31 th	March 1 st

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13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards And Maintenance Requirements
1.06	Source Self-Monitoring, Emission Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
1.18	Rule Effectiveness
1.19	Administrative Hearings
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.04	Construction or Modification of Major Sources in or Impacting Upon Non-Attainment Areas (Emission Offset Requirements)
2.05	Prevention of Significant Deterioration
2.06	Permit Requirements – Other Sources
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
3.01	Ambient Air Quality Standards
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.04	Particulate and Sulfur Dioxide Reduction Requirements
4.05	Hydrocarbon and Nitrogen Oxides Reduction Requirements
4.06	Carbon Monoxide Reduction Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)

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Regulation	Title
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
2.17	Federally Enforceable District Origin Operating Permits
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.
16. The owner or operator shall submit timely reports of abnormal conditions or operational changes that may cause excess emissions, as required by Regulation 1.07.
17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

***Air Pollution Control District
701 W. Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137***

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Plantwide Requirements

Plantwide Requirements**Plantwide Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19

Plantwide Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

- i. The owner or operator shall not allow or cause the plantwide single HAP emissions to equal or exceed 5 tons during any consecutive 12-month period¹. [Regulation 2.17, section 5.1] [Regulation 5.00, section 1.13.5.1]
- ii. The owner or operator shall not allow or cause the plantwide total HAP emissions to equal or exceed 12.5 tons during any consecutive 12-month period¹. [Regulation 2.17, section 5.1] [Regulation 5.00, section 1.13.5.1]

b. PM/PM₁₀

The owner or operator shall not allow plantwide PM/PM₁₀ emissions to exceed 25 tons per 12 consecutive month period¹.
[Regulation 2.17, section 5.1] [Regulation 5.00, section 1.13.5.1]

c. VOC

- i. The owner or operator shall not allow plantwide VOC emissions to exceed 25 tons per 12 consecutive month period¹. [Regulation 2.17, section 5.1] [Regulation 5.00, section 1.13.5.1]
- ii. The owner or operator shall not allow the combined plantwide VOC emissions to exceed 255 lb per day during the ozone season of April 1 through October 31. [Regulation 6.43, section 19.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request, as required by General Condition G6.

a. HAP

The owner or operator shall, monthly, calculate and record the monthly and 12-consecutive month plantwide single HAP and total HAP emissions.

¹ On June 14, 2018, the source requested limits on the criteria pollutants of < 25 tpy, single HAP < 5 tpy, and total HAPs < 12.5 tpy to qualify as FEDOOP STAR Exempt as defined by Regulation 5.00, section 1.13.5.

b. PM/PM₁₀

The owner or operator shall, monthly, calculate and record the monthly and 12-consecutive month plantwide PM/PM₁₀ emissions.

c. VOC

- i. During the ozone season of April 1 through October 31, the owner or operator shall calculate and record the following:
[Regulation 6.43, section 19.3]
 - (1) Product name for each coating, solvent, and cleaner used each day;
 - (2) Total daily gallons of each product used;
 - (3) VOC content of each product, in pounds per gallon; and
 - (4) Total daily VOC emissions.
- ii. The owner or operator shall, monthly, calculate and maintain records of the combined plantwide VOC emissions for each day during the ozone season of April 1 through October 31.
- iii. The owner or operator shall, monthly, calculate and record the monthly and 12-consecutive month plantwide VOC emissions.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

The total plantwide calendar month and consecutive 12-month emissions of each single HAP and total HAPs for each month in the reporting period.

b. PM/PM₁₀

The total plantwide calendar month and consecutive 12-month PM/PM₁₀ emissions for each month in the reporting period.

c. VOC

- i. During the ozone season of April 1 through October 31, total plantwide daily VOC emissions for each day in the reporting period.
- ii. Total plantwide calendar month and consecutive 12-month VOC emissions for each month in the reporting period.

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U1 – Paint booths for coating metal and non-metal parts

Emission Unit U1: Paint booths for coating metal and non-metal parts**U1 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4, and 5
7.59	Standards of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	1, 2, 3, 4, 5, 6, and 7

U1 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E5	One (1) large JBI paint booth at Building C, make King Heating & Cooling, equipped with eight exhaust fans each rated at 14,000 cfm and one (1) large drying oven.	1986	6.43, 7.08, 7.25, 7.59	C46	S1 - S8, S8a for drying oven
E6	One (1) medium JBI paint booth at Building C, make King Heating & Cooling, equipped with a 26,000 cfm exhaust fan and one (1) small drying oven. The small drying oven is used for both paint booths E6 and E7.	1992		C47	S9, S9a for drying oven
E7	One (1) small JBI paint booth at Building C, make King Heating & Cooling, equipped with a 15,000 cfm exhaust fan and one (1) small drying oven. The small drying oven is used for both paint booths E6 and E7.	1992		C48	S10, S9a for drying oven

U1 Control Devices

Control ID	Description	Control Efficiency
C46	Dry mat filters, make Koch Filter Corporation, model Spray Stop S, or equivalent	98%
C47		98%
C48		98%

U1 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

See Plantwide HAP Standards.

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

c. PM/PM₁₀

i. See Plantwide PM/PM₁₀ Standards.

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr for each piece of equipment². [Regulation 7.08, section 3.1.2]

d. VOC

i. See Plantwide VOC Standards.

ii. The owner or operator shall not allow or cause the total VOC emissions from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25, to exceed 5 tons during any consecutive 12-month period, unless a BACT evaluation is submitted and approved by the District³. [Regulation 7.25, section 2.1 and 3.1]

iii. The owner or operator shall not allow or cause VOC emissions, based on a calendar month averaging period, from the affected facility resulting from the coating of metallic surfaces in excess of the following^{4,5}: [Regulation 7.59, section 2.1 and 3.1]

(1) 4.3 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for clear coatings;

² Using the minimum spray gun transfer efficiency of 35%, the percent solids of the material (~ 67%), the spray booth PM emissions cannot exceed the lb/hr standards under Regulation 7.08 uncontrolled.

³ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

⁴ The metal parts surface coating operation is subject to Regulation 7.59. The VOC content standards required by Regulation 7.59 only apply to metal parts coating materials.

⁵ Plantwide equipment subject to Regulation 7.59: U1 E5, U1 E6, U1 E7, U16 E44, and U18 E47 and touchup paint associated with these coating operations.

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- (2) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for air-dried coatings;
- (3) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for extreme performance coatings;
- (4) 3.0 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for all other coatings.

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. HAP

See Plantwide HAP Monitoring and Record Keeping.

b. Opacity

- i. The owner or operator shall inspect the filters in the paint booths at least monthly to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed.
- ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.

c. PM/PM₁₀

- i. See Plantwide PM/PM₁₀ Monitoring and Record Keeping requirements.
- ii. See Monitoring and Record Keeping requirements for Opacity above.

d. VOC

- i. See Plantwide VOC Monitoring and Record Keeping requirements.
- ii. Notwithstanding the Plantwide Condition S2.c.i, an owner or operator of an affected facility subject to Regulation 7.25 shall maintain records that include the following: [Regulation 7.25, section 4.1]
 - (1) The quantity and VOC content of each coating applied on a non-metal surface; and
 - (2) The VOC emissions during each calendar month and each consecutive 12-month period from the surface coating of non-metal surfaces.

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U1 – Paint booths for coating metal and non-metal parts

- iii. Notwithstanding the Plantwide Condition S2.c.i, the owner or operator shall determine compliance with Regulation 7.59 based on a calendar month averaging period. [Regulation 7.59, section 3.2]
- iv. Notwithstanding the Plantwide Condition S2.c.i, an owner or operator of an affected facility subject to Regulation 7.59 shall maintain records that include the following: [Regulation 7.59, section 6.1]
 - (1) The regulation and section number applicable to the affected facility for which the records are being maintained,
 - (2) The application method and substrate type,
 - (3) The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvents (including exempt compounds) used at each point of application during the calendar month.
 - (4) The VOC content as applied in each coating and solvent,
 - (5) The date, or usage record period, for each application of coating and solvent,
 - (6) The amount of surface preparation, clean-up, wash-up solvent (including exempt compounds) used and the VOC content of each material used during the calendar month.
- v. The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24. [Regulation 7.59, section 6.2]

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

See Plantwide HAP Reporting requirements.

b. Opacity

There are no routine compliance reporting requirements for this pollutant.

c. PM/PM₁₀

See Plantwide PM/PM₁₀ Reporting requirements.

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U1 – Paint booths for coating metal and non-metal parts

d. VOC

- i. See Plantwide VOC Reporting requirements.
- ii. For Regulation 7.25, the owner or operator shall report the 12-consecutive month VOC emissions for each month of the reporting period resulting from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25⁶.
- iii. For Regulation 7.59, the owner or operator shall include the amount of coatings and solvents used and the VOC content of each material used during the calendar month for each month of the reporting period.

⁶ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

Emission Unit U3: Plating Shop (Building 117)**U3 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.08	Standards of Performance for New Process Operations	1, 2, 3 and 5
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4 and 5
40 CFR 63, Subpart A	General Provisions	See Table 1 in 40 CFR 63, Subpart N
40 CFR 63, Subpart N	National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.	§63.340, §63.341, §63.342, §63.343, §63.344, §63.345, §63.346, and §63.347
40 CFR 63 Subpart WWWWWW	National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations	§63.11504, §63.11507, §63.11508, and §63.11509

U3 Equipment⁷

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
PE1	Four (4) tanks* with acid exhaust	1992	N/A	N/A	S15
PE2	Seven (7) tanks* with alkaline exhaust	1992	N/A	N/A	S16
PE3	Ten (10) tanks* with alkaline exhaust	1992	N/A	C7	S17
PE4	Three (3) tanks* with alkaline exhaust	1992	7.08	N/A	S18
PE5	Three (3) tanks* with alkaline exhaust	1992	6.43, 7.25	N/A	S19
PE6	Fifteen (15) tanks* with acid exhaust with chromium	1992	7.08, 40 CFR 63 Subpart WWWWWW	C8	S20
PE7	Ten (10) tanks* with acid exhaust with chromium	1992	7.08, 40 CFR 63 Subpart N, Subpart WWWWWW	C9	S21

⁷ For Emission Points PE1, PE2, PE3, and PE13, there are no applicable regulations.

Plant ID: 1216

U3 – Plating Shop

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
PE8	Fourteen (14) tanks* with acid exhaust	1992	7.08, 40 CFR 63 Subpart WWWWWW	N/A	S22
PE9	Ten (10) tanks* with cyanide exhaust	1992		C10	S23
PE10	Fourteen (14) tanks* with alkaline exhaust	1992	7.08	C11	S24
PE11	Five (5) tanks* with chromium exhaust	1992	7.08, 40 CFR 63 Subpart N, Subpart WWWWWW	C12	S25
PE12	Nine (9) tanks* with acid exhaust	1992	40 CFR 63 Subpart WWWWWW	C13	S26
PE13	Fifty-six (56) rinse tanks*	1992	N/A	N/A	N/A

*See the following table for details of each tank.

Emission Point	Tank No.	Process	Applicable NESHAP	Method of Compliance	Actual/Working Capacity (gallons)	Operating Temp. (F)	Exhaust System
PE1	810	Muriatic acid pickle	None	N/A	1212/1077	Ambient	Acid
	820	Zinc phosphate, light	None	N/A	606/538	205-210	Acid
	822	Warm water rinse	None	N/A	606/538	120-140	Acid
	862		None	N/A	1212/1077	120-140	Acid
PE2	260	Oil spray	None	N/A	909/168	Ambient	Alkaline
	824	Phosphoric acid pickle	None	N/A	606/538	150-180	Alkaline
	826	Oil spray	None	N/A	606/538	Ambient	Alkaline
	830	Hot paint strip	None	N/A	1212/1077	180-200	Alkaline
	832	Warm water rinse	None	N/A	1212/1077	120-140	Alkaline
	874	Hard coat anodize	None	N/A	1616/1436	Ambient	Alkaline
	876	Rinse for hard coat anodize	None	N/A	1616/1436	Ambient	Alkaline
PE3	224	Alkaline derust NaOH	None	N/A	1346/1212	180-200	Alkaline
	228	Alkaline rinse	None	N/A	1346/1212	160-180	Alkaline

Plant ID: 1216

U3 – Plating Shop

Emission Point	Tank No.	Process	Applicable NESHAP	Method of Compliance	Actual/Working Capacity (gallons)	Operating Temp. (F)	Exhaust System
	464	Black oxide for steel	None	N/A	135/112	250-260	Alkaline
	600	Inhibited alkaline cleaner	None	N/A	1818/1616	120-140	Alkaline
	800	Hot paint strip	None	N/A	3142/2880	120-140	Alkaline
	805	Warm water rinse	None	N/A	3142/2880	120-140	Alkaline
	840	Alkaline paint strip	None	N/A	303/269	180-200	Alkaline
	842	Warm water rinse	None	N/A	303/269	120-140	Alkaline
	850	Alkaline deruster	None	N/A	303/269	180-200	Alkaline
	852	Cold water rinse	None	N/A	1212/1077	Ambient	Alkaline
PE4	226	Warm water rinse	None	N/A	1346/1212	140-160	Alkaline
	229		None	N/A	1346/1212	160-180	Alkaline
	236	Grain refiner	None	N/A	3231/3029	150-180	Alkaline
PE5	208	Hot paint strip	None	N/A	1346/1212	150-160	Alkaline
	230	Alkaline degreaser	None	N/A	1346/1212	Ambient	Alkaline
	232	Warm water rinse	None	N/A	1346/1212	120-140	Alkaline
PE6	200	PHOSPH. Acid pickle	None	N/A	1459/1212	120-140	Acid
	204	Muriatic acid pickle	None	N/A	1346/1212	Ambient	Acid
	209	Chromic acid	None	N/A	1346/1212	150-200	Acid
	214	Manganese phosphate	40 CFR 63 Subpart WWWWWW 63.11504(a)(1)(iii)	§63.11507(g)	269/236	200-210	Acid
	217	Grain refiner	None	N/A	269/236	160-190	Acid
	218	Manganese phosphate	40 CFR 63 Subpart WWWWWW, §63.11504(a)(1)(iii)	§63.11507(g)	1346/1212	200-210	Acid
	222	Grain refiner	None	N/A	1346/1212	160-190	Acid
	223	Chromate seal	40 CFR 63 Subpart WWWWWW, §63.11504(a)(1)(iii)	§63.11507(g)	3231/3029	150-180	Acid
	520	Anodized strip	None	N/A	606/538	150-180	Acid
	650	Inorganic salt seal	None	N/A	269/236	Ambient	Acid

Plant ID: 1216

U3 – Plating Shop

Emission Point	Tank No.	Process	Applicable NESHAP	Method of Compliance	Actual/Working Capacity (gallons)	Operating Temp. (F)	Exhaust System
	714	Passivation nitric no. 4	None	N/A	404/359	70-90	Acid
	716	Passivation nitric no. 2	None	N/A	404/359	120-140	Acid
	720	Cold water rinse	None	N/A	539/359	Ambient	Acid
	722	Warm water rinse	None	N/A	539/359	140	Acid
	860	Copper bright dip	None	N/A	1212/1077	Ambient	Acid
PE7	238	Manganese phosphate	40 CFR 63 Subpart WWWWWW, §63.11504(a)(1)(iii)	§63.11507(g)	3231/3029	200-210	Acid
	408	Muriatic acid pickle	None	N/A	606/538	Ambient	Acid
	506	Deoxidizer	None	N/A	606/538	Ambient	Acid
	510	Aluminum deoxidizer	None	N/A	303/269	Ambient	Acid
	512	Sulfuric acid anodize	None	N/A	909/808	60-90	Acid
	532	Chromic acid anodize	40 CFR 63 Subpart N	§63.342(a)(1) §63.342(c)(3)(i)(A) §63.342(d)(1) §63.342(f) §63.343(c)(1)(ii)	606/538	90-120	Acid
	614	Conversion coat	40 CFR 63 Subpart WWWWWW, §63.11504(a)(1)(iii)	§63.11507(g)	1818/1616	Ambient	Acid
	617	Warm water rinse	None	N/A	1818/1616	120-140	Acid
	700	Nitric acid dip	None	N/A	303/269	Ambient	Acid
	724	Dichromate seal	40 CFR 63 Subpart WWWWWW, §63.11504(a)(1)(iii)	§63.11507(g)	404/359	140-160	Acid
PE8	412	Chromate conversion coat	40 CFR 63 Subpart WWWWWW, §63.11504(a)(1)(iii)	§63.11507(g)	606/538	Ambient	Acid
	416	Cad & zinc rinse	None	N/A	606/538	120-140	Acid
	418	Zinc phosphate	None	N/A	303/269	190-200	Acid
	424	Copper strip	None	N/A	303/269	Ambient	Acid
	426	Cold rinse	None	N/A	303/269	Ambient	Acid
	428	Water rinse	None	N/A	303/269	Ambient	Acid
	460	Chromic acid rinse	None	N/A	303/269	150-180	Acid
	514	Water rinse	None	N/A	909/808	Ambient	Acid

Plant ID: 1216

U3 – Plating Shop

Emission Point	Tank No.	Process	Applicable NESHAP	Method of Compliance	Actual/Working Capacity (gallons)	Operating Temp. (F)	Exhaust System
	516	DI water seal	None	N/A	606/538	200-210	Acid
	528	Hard anodize	None	N/A	1513/1346	45-55	Acid
	538	Dichromate seal	40 CFR 63 Subpart WWWWWW, §63.11504(a)(1)(iii)	§63.11507(g)	909/808	200-210	Acid
	548	Nickel acetate seal	40 CFR 63 Subpart WWWWWW, §63.11504(a)(1)(iii)	§63.11507(g)	606/538	200-210	Acid
	606	Deoxidizer for aluminum	None	N/A	1616/1436	Ambient	Acid
	610	Alkaline degreaser	None	N/A	1818/1616	120-160	Acid
PE9	350	Cyanide dip	None	N/A	30/22	Ambient	Cyanide
	352	Silver strike	None	N/A	30/22	Ambient	Cyanide
	354	Silver plate	None	N/A	30/22	Ambient	Cyanide
	370	Zinc plating	None	N/A	909/808	Ambient	Cyanide
	376	Cadmium plating	40 CFR 63 Subpart WWWWWW, §63.11504(a)(1)(i)	§63.11507(d) §63.11507(g), §63.11508(c)(7)	606/538	70-90	Cyanide
	378	Cadmium plating			909/808	70-90	Cyanide
	380	Cold water rinse	None	N/A	1616/1400	Ambient	Cyanide
	386	Copper strike	None	N/A	606/538	100-120	Cyanide
	388	Nickle Strip	None	N/A	606/538	Ambient-140	Cyanide
	708	Zincate	None	N/A	303/269	Ambient	Cyanide
PE10	124	Chrome strip	None	N/A	606/539	Ambient	Alkaline
	300	Alkaline Electro cleaner	None	N/A	606/538	160-180	Alkaline
	302	Cold water rinse	None	N/A	606/538	Ambient	Alkaline
	340	Cadmium zinc strip	None	N/A	606/538	Ambient	Alkaline
	346	Tin plate	None	N/A	404/359	150-190	Alkaline
	348	Rinse after tin	None	N/A	2558/1197	Ambient/ 140	Alkaline
	349		None	N/A	2558/1197		Alkaline
	402	Alkaline electroclean	None	N/A	606/538	180-200	Alkaline
	406	Warm rinse electroclean	None	N/A	606/538	120-140	Alkaline
	450	Black oxide for copper	None	N/A	303/269	180-215	Alkaline

Plant ID: 1216

U3 – Plating Shop

Emission Point	Tank No.	Process	Applicable NESHAP	Method of Compliance	Actual/Working Capacity (gallons)	Operating Temp. (F)	Exhaust System
	502	Alkaline aluminum cleaner	None	N/A	606/538	120-140	Alkaline
	540	Black dye	None	N/A	606/538	130-150	Alkaline
	544	Warm rinse for dye	None	N/A	606/538	140-160	Alkaline
	908	Caustic	None	N/A	1799/1748	Ambient	Alkaline
PE11	102	Chrome plating	40 CFR 63 Subpart N	§63.342(a)(1) §63.342(c)(1)(ii) §63.342(c)(3)(i)(A)	1616/1481	138-142	Chromium compounds
	104	Chrome plating			808/718	138-142	Chromium compounds
	112	Warm rinse /chrome	None	N/A	673/600	120-140	Chromium compounds
	900	Chrome plate	40 CFR 63 Subpart N	§63.342(a)(1) §63.342(c)(1)(ii) §63.342(c)(3)(i)(A)	3862/3755	128 - 132	Chromium compounds
	906	Electropolish	40 CFR 63 Subpart WWWW, §63.11504(a)(1)(vi)	§63.11507(a)(2) §63.11507(g), §63.11508(c)(2)	1648/1600	130 - 150	Acid
PE12	118	Sulfuric acid activate	None	N/A	404/359	Ambient	Acid
	304	Muriatic acid pickle	None	N/A	606/538	Ambient	Acid
	308	Sulfuric acid activate	None	N/A	606/538	Ambient	Acid
	310		None	N/A	572/538	Ambient	Acid
	320	Electroless nickel	40 CFR 63 Subpart WWWW, §63.11504(a)(1)(ii)	§63.11507(g)	572/538	Ambient	Acid
	330				572/538	120-140	Acid
	360	Nickel strip	None	N/A	303/269	Ambient	Acid
	366	Electroless nickel	40 CFR 63 Subpart WWWW, §63.11504(a)(1)(ii)	§63.11507(g)	90/68	185 -195	Acid
	367				234/214	185-195	Acid
PE13	110	Recovery rinse	None	N/A	808/718	Ambient	None
	114	Demask after chrome	None	N/A	449/400	Ambient	None
	120	Cold water rinse	None	N/A	1077/909	Ambient	None
	122		None	N/A	1077/909	Ambient	None
	126		None	N/A	1257/1167	Ambient	None
	127		None	N/A	1257/1167	Ambient	None
	201		None	N/A	1616/1436	Ambient	None
	205		None	N/A	1346/1212	Ambient	None
	215		None	N/A	539/479	Ambient	None
	216		None	N/A	539/479	Ambient	None
	220		None	N/A	1346/1212	Ambient	None

Plant ID: 1216

U3 – Plating Shop

Emission Point	Tank No.	Process	Applicable NESHAP	Method of Compliance	Actual/Working Capacity (gallons)	Operating Temp. (F)	Exhaust System
	240		None	N/A	3231/3029	Ambient	None
	306		None	N/A	606/538	Ambient	None
	312		None	N/A	572/538	Ambient	None
	322		None	N/A	1077/958	Ambient	None
	323		None	N/A	1077/958	Ambient	None
	332		None	N/A	1077/958	Ambient	None
	333		None	N/A	1616/1437	Ambien	None
	342	Cad/zinc strip rinse	None	N/A	1616/1437	Ambient	None
	343		None	N/A	1616/1437	Ambient	None
	362	Rinse	None	N/A	1616/1437	Ambient	None
	363	Rinse	None	N/A	1616/1437	Ambient	None
	372	Cold water rinse	None	N/A	1616/1437	Ambient	None
	373		None	N/A	1616/1437	Ambient	None
	381		None	N/A	1616/1437	Ambient	None
	390		None	N/A	1616/1437	Ambient	None
	391		None	N/A	606/538	Ambient	None
	410		None	N/A	606/538	Ambient	None
	414	Cad & zinc rinse	None	N/A	606/538	Ambient	None
	420	Rinse for tank 418	None	N/A	606/538	Ambient	None
	422		None	N/A	606/538	Ambient	None
	452	Water rinse	None	N/A	606/538	Ambient	None
	454	Water rinse	None	N/A	606/538	Ambient	None
	462	Cold water rinse	None	N/A	135/112	Ambient	None
	504	Rinse for alkaline clean	None	N/A	606/538	Ambient	None
	508	Cold rinse aluminum	None	N/A	606/538	Ambient	None
	515	Water rinse	None	N/A	909/808	Ambient	None
	521	Water rinse	None	N/A	1212/1077	Ambient	None
	522	Water rinse	None	N/A	1212/1077	Ambient	None
	530	Water rinse	None	N/A	1515/1346	Ambient	None
	534	Water rinse	None	N/A	1212/1077	Ambient	None
	535	Water rinse	None	N/A	1212/1077	Ambient	None
	542	Water rinse for dye	None	N/A	606/538	Ambient	None
	602	Cold water rinse	None	N/A	1818/1616	Ambient	None
	603		None	N/A	1818/1616	Ambient	None
	611	Cold water rinse	None	N/A	1818/1616	Ambient	None
	616		None	N/A	1818/1616	Ambient	None

Plant ID: 1216

U3 – Plating Shop

Emission Point	Tank No.	Process	Applicable NESHAP	Method of Compliance	Actual/Working Capacity (gallons)	Operating Temp. (F)	Exhaust System
	652	Cold water rinse	None	N/A	269/236	Ambient	None
	702		None	N/A	606/538	Ambient	None
	704		None	N/A	606/538	Ambient	None
	710		None	N/A	606/538	Ambient	None
	712		None	N/A	606/538	Ambient	None
	811		None	N/A	1212/1077	Ambient	None
	861		None	N/A	1212/1077	Ambient	None
	902		None	N/A	1799/1748	Ambient	None
	904		None	N/A	1799/1748	Ambient	None

U3 Control Devices

Control ID	Description	Control Efficiency ⁸
C7	Packed bed wet scrubber (PS-1)	98%
C8	Packed bed wet scrubber (PS-2)	98%
C9	Composite Mesh System/Packed Bed Scrubber (PS-3) with HEPA Filter	99.97%
C10	Packed bed wet scrubber (PS-4)	98%
C11	Packed bed wet scrubber (PS-5)	98%
C12	Composite Mesh System/Packed Bed Scrubber (PS-6) with HEPA Filter	99.97%
C13	Packed bed wet scrubber (PS-7)	98%

⁸ Only C8, C9, C10, C11, C12, and C13 control PM/PM₁₀. For C9 and C12, stack tests were performed on September 4 and 5, 2019 (OnBase 123121). The stack test for C8 was conducted in August 1993.

U3 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

- i. See Plantwide HAP Standards.

For 40 CFR 63, Subpart N:

- ii. At all times, each owner or operator must operate and maintain the affected source subject to the requirements 40 CFR 63, Subpart N, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator (the District) which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.342(a)(1)]
- iii. Each owner or operator of an affected source subject to the provisions 40 CFR 63, Subpart N, shall comply with these requirements in this section on and after the compliance dates specified in 40 CFR 63.343(a). All affected sources are regulated by applying maximum achievable control technology. [40 CFR 63.342(a)(2)]
- iv. The emission limitations in this section apply during tank operation as defined in 40 CFR 63.341, and during periods of startup and shutdown as these are routine occurrences for affected sources subject to this subpart. In response to an action to enforce the standards set forth in this subpart, the owner or operator may assert a defense to a claim for civil penalties for violations of such standards that are caused by a malfunction, as defined in 40 CFR 63.2. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief. [40 CFR 63.342(b)(1)]
- v. To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the reporting requirements of 40 CFR 63.342(b)(1)(ii), and must prove by a preponderance of evidence that:
 - (1) The violation was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a

process to operate in a normal and usual manner; and could not have been prevented through careful planning, proper design or better operation and maintenance practices; and did not stem from any activity or event that could have been foreseen and avoided, or planned for; and was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

[40 CFR 63.342(b)(1)(i)(A)]

- (2) Repairs were made as expeditiously as possible when exceeded violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

[40 CFR 63.342(b)(1)(i)(B)]

- (3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

[40 CFR 63.342(b)(1)(i)(C)]

- (4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

[40 CFR 63.342(b)(1)(i)(D)]

- (5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and

[40 CFR 63.342(b)(1)(i)(E)]

- (6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and [40 CFR 63.342(b)(1)(i)(F)]

- (7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

[40 CFR 63.342(b)(1)(i)(G)]

- (8) At all times, the affected sources were operated in a manner consistent with good practices for minimizing emissions; and

[40 CFR 63.342(b)(1)(i)(H)]

- (9) A written root cause analysis was prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using the best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

[40 CFR 63.342(b)(1)(i)(I)]

- vi. If an owner or operator is controlling a group of tanks with a common add-on air pollution control device, the emission limitations of 40 CFR 63.342(c), (d), and (e) apply whenever any one affected source is operated. The emission limitation that applies to the group of affected sources is:

[40 CFR 63.342(b)(2)]

- (1) The emission limitation identified in 40 CFR 63.342(c), (d), and (e) if the affected sources are performing the same type of operation (e.g., hard chromium electroplating), are subject to the same emission limitation, and are not controlled by an add-on air pollution control device also controlling non-affected sources; [40 CFR 63.342(b)(2)(i)]
 - (2) The emission limitation calculated according to 40 CFR 63.344(e)(3) if affected sources are performing the same type of operation, are subject to the same emission limitation, and are controlled with an add-on air pollution control device that is also controlling non-affected sources; and [40 CFR 63.342(b)(2)(ii)]
 - (3) The emission limitation calculated according to 40 CFR 63.344(e)(4) if affected sources are performing different types of operations, or affected sources are performing the same operations but subject to different emission limitations, and are controlled with an add-on air pollution control device that may also be controlling emissions from non-affected sources. [40 CFR 63.342(b)(2)(iii)]
- vii. *Standards for open surface hard chromium electroplating tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by: [40 CFR 63.342(c)(1)]
- (1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf) for all open surface hard chromium electroplating tanks that are existing affected sources and are located at small, hard chromium electroplating facilities⁹; [40 CFR 63.342(c)(1)(ii)]
 - (2) After the date that is 3 years after publication of this final rule in the federal register, the owner or operator of an affected open surface hard chromium electroplating tank shall not add PFOS-based fume suppressants to any affected open surface hard chromium electroplating tank. [40 CFR 63.342(c)(1)(v)]
- viii. *Standards for decorative chromium electroplating tanks using a chromic acid bath and chromium anodizing tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by either: [40 CFR 63.342(d)]

⁹ Performance tests for PM and HAP were required by construction permit 435-08-C and operating permit 618-08-C for the two HEPA filter for PS-3 and PS-6 no later than June 30, 2009 using EPA reference Method 306. BAE Systems performed the required tests for PM, and HAP on September 4 and 5, 2019. According to the stack test, the controlled PM emissions from this unit are in compliance with the lb/hr limit for PM; the chromium emissions are in compliance with the new mg/dscm limits in 40 CFR 63, Subpart N finalized on August 15, 2012.

- (1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.007 mg/dscm (3.1×10^{-6} gr/dscf) for all existing decorative chromium electroplating tanks using a chromic acid bath and all existing chromium anodizing tanks; [40 CFR 63.342(d)(1)]
 - (2) If a chemical fume suppressant containing a wetting agent is used, not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 40 dynes/cm (2.8×10^{-3} lb_f/ft), as measured by a stalagmometer or 33 dynes/cm (2.3×10^{-3} lb_f/ft), as measured by a tensiometer at any time during tank operation, for all existing, new, or reconstructed decorative chromium electroplating tanks using a chromic acid bath and all existing, new, or reconstructed chromium anodizing tanks; [40 CFR 63.342(d)(3)]
 - (3) After the date that is 3 years after publication of this final rule in the federal register, the owner or operator of an affected decorative chromium electroplating tank or an affected chromium anodizing tank shall not add PFOS-based fume suppressants to any affected decorative chromium electroplating tank or chromium anodizing tank. [40 CFR 63.342(d)(4)]
- ix. *Operation and maintenance practices.* All owners or operators subject to the standards in 40 CFR 63.342(c) and (d) are subject to these operation and maintenance practices. [40 CFR 63.342(f)]
- (1) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices. [40 CFR 63.342(f)(1)(i)]
 - (2) Malfunctions shall be corrected as soon as practicable after their occurrence. [40 CFR 63.342(f)(1)(ii)]
 - (3) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards. [40 CFR 63.342(f)(1)(iii)]
 - (4) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the District, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source. [40 CFR 63.342(f)(2)(i)]
 - (5) Based on the results of a determination made under 40 CFR 63.342(f)(2)(i), the District may require that an owner or operator of an affected source make changes to the operation and maintenance

plan required by §63.342(f)(3) for that source. Revisions may be required if the District finds that the plan: [40 CFR 63.342(f)(2)(ii)]

- (a) Does not address a malfunction that has occurred; [40 CFR 63.342(f)(2)(ii)(A)]
- (b) Fails to provide for the proper operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or [40 CFR 63.342(f)(2)(ii)(B)]
- (c) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable. [40 CFR 63.342(f)(2)(ii)(C)]

x. *Operation and maintenance plan.*¹⁰ [40 CFR 63.342(f)(3)]

- (1) The owner or operator of an affected source subject to 40 CFR 63.342(f) shall prepare an operation and maintenance plan no later than the compliance date. The plan shall be incorporated by reference into the source's title V permit, if and when a title V permit is required. The plan shall include the following elements: [40 CFR 63.342 (f)(3)(i)]
 - (a) The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment; [40 CFR 63.342 (f)(3)(i)(A)]
 - (b) For sources using an add-on control device or monitoring equipment to comply with this subpart, the plan shall incorporate the operation and maintenance practices for that device or monitoring equipment, as identified in Table 1 of §63.342, if the specific equipment used is identified in Table 1 of §63.342; [40 CFR 63.342 (f)(3)(i)(B)]

¹⁰ The source prepared and submitted an operation and maintenance plan to the District on December 4, 2008.

Table 1 to CFR 63.342 – Summary of Operation and Maintenance Practices

Control ID	Description	Frequency
C9 and C12	1. Visually inspect to ensure proper drainage, no chromic acid buildup on the packed-beds, and no evidence of chemical attack on the structural integrity.	Quarterly
	2. Visually inspect back portion of the mesh pad closest to the fan to ensure that it is dry and no breakthrough of chromic acid mist.	Quarterly
	3. Visually inspect ductwork from tank to the control device to ensure there are no leaks.	Quarterly
	4. Add fresh makeup water to the top of the packed-bed.	Whenever makeup is needed

- (c) If the specific equipment used is not identified in Table 1 of §63.342, the plan shall incorporate proposed operation and maintenance practices. These proposed operation and maintenance practices shall be submitted for approval as part of the submittal required under §63.343(d); [40 CFR 63.342(f)(3)(i)(C)]
 - (d) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and [40 CFR 63.342(f)(3)(i)(D)]
 - (e) The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions. [40 CFR 63.342(f)(3)(i)(E)]
 - (f) The plan shall include housekeeping procedures, as specified in Table 2 of 40 CFR 63.342. [40 CFR 63.342(f)(3)(i)(F)]
- (2) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment,

add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events. [40 CFR 63.342 (f)(3)(ii)]

- (3) Recordkeeping associated with the operation and maintenance plan is identified in 40 CFR 63.346(b). Reporting associated with the operation and maintenance plan is identified in 40 CFR 63.347 (g) and (h) and 40 CFR 63.347(f)(3)(iv). [40 CFR 63.342 (f)(3)(iii)]
- (4) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by 40 CFR 63.342(f)(3)(i), the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the District.
[40 CFR 63.342 (f)(3)(iv)]
- (5) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the District for the life of the affected source or until the source is no longer subject to the provisions of Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the District for a period of 5 years after each revision to the plan. [40 CFR 63.342(f)(v)]
- (6) To satisfy the requirements of 40 CFR 63.342(f)(3), the owner or operator may use applicable standard operating procedure (SOP) manual, Occupations Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section. [40 CFR 63.342(f)(iv)]

- xi. The standards in this section that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent. [40 CFR 63.342(g)]

The source requested to be classified as a Small Hard Chromium Electroplating Facility, as defined in §63.341, in a letter to the District dated September 04, 1998, therefore, the owner or operator, with a maximum cumulative potential rectifier capacity of 60 million amp-hr/yr or more, may be considered small if the actual cumulative rectifier capacity is less than 60 million amp-hr/yr as demonstrated using the following procedures:
[40 CFR 63.342(c)(3)(i)]

- (1) If records show that the facility's previous annual actual rectifier capacity was less than 60 million amp-hr/yr, by using nonresettable ampere-hr meters and keeping monthly records of actual ampere-hr usage for each 12-month rolling period following the compliance date in accordance with §63.346(b)(12). The actual cumulative rectifier capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months; or
[40 CFR 63.342(c)(3)(i)(A)]
- (2) By accepting a federally-enforceable limit on the maximum cumulative potential rectifier capacity of a hard chromium electroplating facility and by maintaining monthly records in accordance with §63.346(b)(12) to demonstrate that the limit has not been exceeded. The actual cumulative rectifier capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months. [40 CFR 63.342(c)(3)(i)(B)]
- (3) Once the monthly records required to be kept by §63.346(b)(12) and by this §63.342(c)(3)(ii) show that the actual cumulative rectifier capacity over the previous 12-month rolling period corresponds to the large designation, the owner or operator is subject to the emission limitation identified in §63.342(c)(1)(i), (iii), (c)(2)(i), (iii), or (iv), in accordance with the compliance schedule of §63.343(a)(5). [40 CFR 63.342(c)(3)(ii)]

For 40 CFR 63, Subpart WWWWWW:

xii. For Emission Point PE11 (tank 906):

- (1) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to §§63.11507(a)(2)(i) and (ii). [40 CFR 63.11507(a)(2)]
 - (a) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions. [40 CFR 63.11507(a)(2)(i)]
 - (b) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
[40 CFR 63.11507(a)(2)(ii)]

xiii. For tanks 376 and 378 (in PE9), electroplating tanks that use cyanide in the plating bath, operate at pH greater than or equal to 12, and contain one or more of the plating and polishing metal HAP, you must comply with the requirements in §§63.11507(d)(1) and (2): [40 CFR 63.11507(d)]

- (1) You must measure and record the pH of the bath upon startup of the bath, as defined in §63.11511. No additional pH measurements are required. [40 CFR 63.11507(d)(1)]
 - (2) You must implement the applicable management practices in §63.11507(g), as practicable. [40 CFR 63.11507(d)(2)]
- xiv. For Emission Points PE6 (tanks 214, 218, 223), PE7 (tanks 238, 614, 724), PE8 (tanks 412, 538, 548), PE9 (tanks 376, 378), PE11 (tank 906), and PE12 (tanks 320, 330, 366, 367):
- (1) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in §§63.11507(g)(1) through (12), as practicable. [40 CFR 63.11507(g)]
 - (a) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements. [40 CFR 63.11507(g)(1)]
 - (b) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable. [40 CFR 63.11507(g)(2)]
 - (c) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable. [40 CFR 63.11507(g)(3)]
 - (d) Use tank covers, if already owned and available at the facility, whenever practicable. [40 CFR 63.11507(g)(4)]
 - (e) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality) [40 CFR 63.11507(g)(5)]
 - (f) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable. [40 CFR 63.11507(g)(6)]
 - (g) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable. [40 CFR 63.11507(g)(7)]

- (h) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable. [40 CFR 63.11507(g)(8)]
- (i) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable. [40 CFR 63.11507(g)(9)]
- (j) Minimize spills and overflow of tanks, as practicable. [40 CFR 63.11507(g)(10)]
- (k) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable. [40 CFR 63.11507(g)(11)]
- (l) Perform regular inspections to identify leaks and other opportunities for pollution prevention. [40 CFR 63.11507(g)(12)]

b. Opacity

The owner or operator shall not cause to be discharged into the atmosphere any gases that may contain particulate matter that is equal to or greater than 20% opacity. [Regulation 7.08, section 3.1.1]

c. PM/PM₁₀

- i. See Plantwide PM/PM₁₀ Standards.
- ii. The owner or operator shall not allow PM emissions from each piece of equipment to exceed 2.34 lb/hr¹¹. [Regulation 7.08, section 3.1.2]

d. VOC

- i. For Emission Point PE5:
 - (1) See Plantwide VOC Standards.
 - (2) The owner or operator shall not allow or cause the total VOC emissions from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25, to exceed 5 tons during any consecutive 12-month period, unless a BACT evaluation is submitted and approved by the District¹². [Regulation 7.25, section 2.1 and 3.1]

¹¹ The PM emissions from this unit cannot exceed the PM standard under Regulation 7.08 uncontrolled.

¹² The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. HAP

- i. See Plantwide HAP Monitoring and Record Keeping requirements.

For 40 CFR 63, Subpart N:

- ii. The owner or operator of an affected source subject to the emission limitations of 40 CFR 63, Subpart N, shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in §63.343 for the air pollution control techniques expected to be used by the owner or operator of affected sources. [40 CFR 63.343(c)]
- iii. For Packed-bed scrubber systems/*Composite mesh-pad systems* (PS-3 and PS-6), the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests. [40 CFR 63.343(c)(3), referencing 40 CFR 63.343(c)(1)(ii)]
- iv. The owner or operator of an affected source subject to the provisions of 40 CFR 63 Subpart N shall maintain the following records for such source: [40 CFR 63.346(b)]
 - (1) Inspection records for the add-on air pollution control device and monitoring equipment to document that the inspection and maintenance required by the work practice standards of 40 CFR 63.342(f) and Table 1 of §63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection. [40 CFR 63.346(b)(1)]
 - (2) Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment, except routine housekeeping practices; [40 CFR 63.346(b)(2)]

- (3) Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment. [40 CFR 63.346(b)(3)]
- (4) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.342(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; [40 CFR 63.346(b)(4)]
- (5) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by §63.342(f)(3). [40 CFR 63.346(b)(5)]
- (6) Test reports documenting results of all performance tests. [40 CFR 63.346(b)(6)]
- (7) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 CFR 63.344(e). [40 CFR 63.346(b)(7)]
- (8) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected. [40 CFR 63.346(b)(8)]
- (9) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment. [40 CFR 63.346(b)(9)]
- (10) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment. [40 CFR 63.346(b)(10)]
- (11) The total process operating time of the affected source during the reporting period. [40 CFR 63.346(b)(11)]
- (12) Records of the actual cumulative rectifier capacity of hard chromium electroplating tanks at a facility expended during each month of the reporting period, and the total capacity expended to date for a reporting period, if the owner or operator is using the actual cumulative rectifier capacity to determine facility size in accordance with 40 CFR 63.342(c)(2) and [40 CFR 63.346(b)(12)]
- (13) All documentation supporting the notifications and reports required by §§63.9, 63.10, and 63.347. [40 CFR 63.346(b)(16)]

- v. The owner or operator shall maintain all records for a period of five years in accordance with 40 CFR 63.10(b)(1). [40 CFR 63.346(c)]

For 40 CFR 63, Subpart WWWW:

- vi. If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), “What are my standards and management practices?” and you use a control system, as defined in §63.11511, “What definitions apply to this subpart?”, to comply with this subpart, you must demonstrate initial compliance according to §§63.11508(c)(2)(i) through (v). [40 CFR 63.11508(c)(2)]
 - (1) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator. [40 CFR 63.11508(c)(2)(i)]
 - (2) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer’s specifications and instructions. [40 CFR 63.11508(c)(2)(ii)]
 - (3) You must implement the applicable management practices specified in §63.11507(g), “What are my standards and management practices?”, as practicable. [40 CFR 63.11508(c)(2)(iii)]
 - (4) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), as practicable. [40 CFR 63.11508(c)(2)(iv)]
 - (5) You must follow the manufacturer’s specifications and operating instructions for the control system at all times. [40 CFR 63.11508(c)(2)(v)]
- vii. If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in §63.11507(d), “What are my standards and management practices?”, you must demonstrate initial compliance according to §§63.11508(c)(7)(i) through (iii). [40 CFR 63.11508(c)(7)]
 - (1) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at startup, as defined in §63.11511, according to the requirements of §63.11507(d)(1). [40 CFR 63.11508(c)(7)(i)]
 - (2) You must implement the applicable management practices specified in §63.11507(g), “What are my standards and management practices?”, as practicable. [40 CFR 63.11508(c)(7)(ii)]

- (3) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), as practicable. [40 CFR 63.11508(c)(7)(iii)]
- viii. To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must always operate and maintain your affected source, including air pollution control equipment. [40 CFR 63.11508(d)(1)]
- ix. To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must prepare an annual compliance certification according to the requirements specified in §63.11509(c), and keep it in a readily-accessible location for inspector review. [40 CFR 63.11508(d)(2)]
- x. To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, if you own or operate an affected electroplating or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), and you use a control system to comply with this subpart; you must demonstrate continuous compliance according to §§63.11508(d)(4)(i) through (v). [40 CFR 63.11508(d)(4)]
 - (1) You must operate and maintain the control system according to the manufacturer's specifications and instructions. [40 CFR 63.11508(d)(4)(i)]
 - (2) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions. [40 CFR 63.11508(d)(4)(ii)]
 - (3) You must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions. [40 CFR 63.11508(d)(4)(iii)]
 - (4) You must record the results of all control system inspections, deviations from proper operation, and any corrective action taken. [40 CFR 63.11508(d)(4)(iv)]
 - (5) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators. [40 CFR 63.11508(d)(4)(v)]
- xi. If you own or operate an affected tank or other operation that is subject to the management practices specified in §63.11507(g), you must demonstrate continuous compliance according to §§63.11508(d)(8)(i) and (ii). [40 CFR 63.11508(d)(8)]

- (1) You must implement the applicable management practices during all times that the affected tank or process is in operation.
[40 CFR 63.11508(d)(8)(i)]
- (2) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.
[40 CFR 63.11508(d)(8)(ii)]

b. Opacity

There are no monitoring and record keeping requirements for this pollutant.

c. PM/PM₁₀

See Plantwide PM/PM₁₀ Monitoring and Record Keeping requirements.

d. VOC

i. For Emission Point PE5:

- (1) See Plantwide VOC Monitoring and Record Keeping requirements.
- (2) Notwithstanding the Plantwide Condition S2.c.i, an owner or operator of an affected facility subject to Regulation 7.25 shall maintain records that include the following:
[Regulation 7.25, section 4.1]
 - (a) The quantity of material used and VOC content.
 - (b) The VOC emissions during each calendar month and each consecutive 12-month period.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

- i. See Plantwide HAP Reporting requirements.

For 40 CFR 63, Subpart N:

- ii. The owner or operator of each affected source subject to these standards shall fulfill all reporting requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of 40 CFR 63 Subpart N. These reports shall be made to the District. [40 CFR 63.347(a)]

- (1) Reports required by subpart A of 40 CFR 63 and this section may be sent by U.S. mail, fax, or by another courier.
[40 CFR 63.347(a)(1)]
 - (a) Submittals sent by U.S. mail shall be postmarked on or before the specified date. [40 CFR 63.347(a)(1)(i)]
 - (b) Submittals sent by other methods shall be received by the District on or before the specified date.
[40 CFR 63.347(a)(1)(ii)]
 - (2) If acceptable to both the District and the owner or operator of an affected source, reports may be submitted on electronic media.
[40 CFR 63.347(a)(2)]
- iii. The reporting requirements of this section apply to the owner or operator of an affected source when such source becomes subject to the provisions of this subpart. [40 CFR 63.347(b)]
 - iv. The owner or operator shall submit the Notification of Compliance Status each time that an affected source becomes subject to the requirements of this subpart¹³. [40 CFR 63.347(e)(1)]
 - v. *Ongoing compliance status reports for area sources.* The owner or operator of an affected source that is located at an area source site shall prepare a summary report to document the ongoing compliance status of the affected source. The report shall contain the information identified in §63.347(g)(3), shall be completed annually and retained on site, and made available to the District upon request. The report shall be completed annually except as provided in §63.347(h)(2). [40 CFR 63.347(h)(1)]
 - vi. Reports of exceedances. (i) If either of the following conditions is met, semiannual reports shall be prepared and submitted to the District:
[40 CFR 63.347(h)(2)(i)]
 - (1) The total duration of excess emissions (as indicated by the monitoring data collected by the owner or operator of the affected source in accordance with §63.343(c)) is 1 percent or greater of the total operating time for the reporting period; or
[40 CFR 63.347(h)(2)(i)(A)]
 - (2) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time. [40 CFR 63.347(h)(2)(i)(B)]
 - vii. Once an owner or operator of an affected source reports an exceedance as defined in §63.347(h)(2)(i), ongoing compliance status reports shall be

¹³ The source submitted an Initial Notification Report and Notification of Compliance Status on January 25, 1997.

submitted semiannually until a request to reduce reporting frequency under §63.347 (h)(3) is approved. [40 CFR 63.347(h)(2)(ii)]

- viii. The District may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.
[40 CFR 63.347(h)(2)(iii)]
- ix. Request to reduce frequency of ongoing compliance status reports. (i) An owner or operator who is required to submit ongoing compliance status reports on a semiannual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual and/or be allowed to maintain the annual report onsite if all of the following conditions are met: [40 CFR 63.347(h)(3)(i)]
 - (1) For 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;
[40 CFR 63.347(h)(3)(i)(A)]
 - (2) The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of subpart A and this subpart; and [40 CFR 63.347(h)(3)(i)(B)]
 - (3) The District does not object to a reduced reporting frequency for the affected source, as provided in §§63.347(h)(3) (ii) and (iii).
[40 CFR 63.347(h)(3)(i)(C)]
- x. The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the District in writing of his or her intention to make such a change, and the District does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the District may review information concerning the source's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission limitations and work practice standards. Such information may be used by the District to make a judgement about the source's potential for noncompliance in the future. If the District disapproves the owner or operator's request to reduce reporting frequency, the District will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the District to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
[40 CFR 63.347(h)(3)(ii)]

- xi. As soon as the monitoring data required by §63.343(c) show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannual, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the District to reduce the reporting frequency as allowed by §63.347(h)(3). [40 CFR 63.347(h)(3)(iii)]
- xii. Report. The owner or operator seeking to assert an affirmative defense shall submit a written report to the District with all necessary supporting documentation, that it has met the requirements set forth in 40 CFR 63.342(b)(1)(i). This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmation defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard. [40 CFR 63.342(b)(1)(ii)]

For 40 CFR 63, Subpart WWWW:

- xiii. If you own or operate an affected source, you must prepare an annual certification of compliance report according to §§63.11509(c)(1) through (7). These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report. [40 CFR 63.11509(c)]
 - (1) If you own or operate an affected tank or other affected plating and polishing operation that is subject to the management practices specified in §63.11507(g), “What are my standards and management practices?” you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable. [40 CFR 63.11509(c)(6)]
- xiv. If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority. [40 CFR 63.11509(d)]

b. Opacity

There are no compliance reporting requirements for this pollutant.

c. PM/PM₁₀

See Plantwide PM/PM₁₀ Reporting requirements.

d. VOC

i. See Plantwide VOC Reporting requirements.

ii. For Regulation 7.25, the owner or operator shall report the 12-consecutive month VOC emissions for each month of the reporting period resulting from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25¹⁴.

S4. Testing

[Regulation 2.17, section 5.2]

a. HAP

The owner or operator of an affected source complying with the emission limitations in §63.343 through the use of a composite mesh-pad system may repeat the performance test and establish as a new site-specific operating parameter the pressure drop across the composite mesh-pad system according to the requirements in §63.343(c)(1)(i) or (ii). To establish a new site-specific operating parameter for pressure drop, the owner or operator shall satisfy the requirements specified in §§63.343(c)(1)(iii)(A) through (D). [40 CFR 63.343(c)(1)(iii)]

¹⁴ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

Plant ID: 1216

U5 – Fiberglass Repair Application

Emission Unit U5: Fiberglass Repair Application**U5 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3.2, 3.3, 4.1, 4.2, 5.1 and 5.2

U5 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E32	One (1) fiberglass repair application	1997	6.43, 7.25	NA	NA

U5 Control Devices

There are no control devices associated with this unit.

U5 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

See Plantwide HAP Standards.

b. VOC

i. See Plantwide VOC Standards.

ii. The owner or operator shall not allow or cause the total VOC emissions from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25 to exceed 5 tons during any consecutive 12-month period, unless a BACT evaluation is submitted and approved by the District¹⁵.
[Regulation 7.25, section 2.1 and 3.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. HAP

See Plantwide HAP Monitoring and Record Keeping requirements.

b. VOC

i. See Plantwide VOC Monitoring and Record Keeping requirements.

ii. Notwithstanding the Plantwide Condition S2.c.i, an owner or operator of an affected facility subject to Regulation 7.25 shall maintain records that include the following: [Regulation 7.25, section 4.2]

- (1) The quantity and VOC content of each coating applied during each calendar month;
- (2) The VOC emissions during each calendar month and each consecutive 12-month period.

¹⁵ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

See Plantwide HAP Reporting requirements.

b. VOC

i. See Plantwide VOC Reporting requirements.

ii. For Regulation 7.25, the owner or operator shall report the 12-consecutive month VOC emissions for each month of the reporting period resulting from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25¹⁶.

¹⁶ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

Plant ID: 1216

U6 – Cold Solvent Parts Cleaners

Emission Unit U6: Cold Solvent Parts Cleaner without Secondary Reservoirs**U6 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	1 through 4
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19

U6 Equipment

Emission Point	Description	Applicable Regulations	Control ID	Release ID
E33f	One (1) cold solvent parts cleaner without secondary reservoir installed 2018	6.18, 6.43	NA	NA

U6 Control Devices

There are no control devices associated with this unit.

U6 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. VOC

- i. See Plantwide VOC Standards.
- ii. The owner or operator shall install, maintain, and operate each cold cleaner as follows: [Regulation 6.18, section 4]
 - (1) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. [Regulation 6.18, section 4.1.1]
 - (2) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. [Regulation 6.18, section 4.1.2]
 - (3) A permanent, conspicuous label summarizing the operating requirements specified in Specific Condition 1.b. shall be installed on or near the cold cleaner. [Regulation 6.18, section 4.1.3]
 - (4) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. [Regulation 6.18, section 4.1.4]
 - (5) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. [Regulation 6.18, section 4.1.6]
 - (6) If a pump-agitated solvent bath is used, then the agitator shall be operated to produce no more than a rolling motion of solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. An air-agitated solvent bath shall not be used. [Regulation 6.18, section 4.1.7]
 - (7) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. [Regulation 6.18, section 4.1.8]

- iii. The owner or operator shall observe at all times the following operating requirements: [Regulation 6.18, section 4.2]
 - (1) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. [Regulation 6.18, section 4.2.1]
 - (2) The solvent level in the cold cleaner shall not exceed the fill line. [Regulation 6.18, section 4.2.2]
 - (3) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. [Regulation 6.18, section 4.2.3]
 - (4) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. [Regulation 6.18, section 4.2.4]
 - (5) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. [Regulation 6.18, section 4.2.5]
 - (6) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. [Regulation 6.18, section 4.2.6]
 - (7) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. [Regulation 6.18, section 4.2.7]
- iv. The owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). [Regulation 6.18, section 4.3.2]

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. VOC

- i. See Plantwide VOC Monitoring and Record Keeping requirements.

Plant ID: 1216

U6 – Cold Solvent Parts Cleaners

- ii. The owner or operator shall maintain records that include the following for each purchase: [Regulation 6.18, section 4.4.2]
 - (1) The name and address of the solvent supplier;
 - (2) The date of the purchase;
 - (3) The type of the solvent; and
 - (4) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F)

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. VOC

See Plantwide VOC Reporting requirements.

Plant ID: 1216

U8 – Vapor Degreaser

Emission Unit U8: Vapor Degreaser with Refrigerated Condenser**U8 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	1, 2, 3, 5
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19

U8 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E35	One (1) 30-gallon vapor degreaser with refrigerated condenser for cleaning metal parts, make Branson, model WSD-1216W, capacity 22 gallons	2005	6.18, 6.43	C35	NA

U8 Control Devices

Control ID	Description	Control Efficiency
C35	One (1) refrigerated condenser	NA

U8 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. VOC

- i. See Plantwide VOC Standards.
- ii. The open top vapor degreaser shall be equipped with a cover that can be opened and closed easily without disturbing the vapor zone. The cover shall be free of cracks, holes, and other defects. If the degreaser opening is greater than 10 square feet, the cover must be powered. If a lip exhaust is used, the closed cover shall be below the level of the lip exhaust.
[Regulation 6.18, section 5.1.1]
- iii. The open top vapor degreaser shall be equipped with the following safety switches: [Regulation 6.18, section 5.1.2]
 - (1) Condenser flow switch and thermostat to shut off the sump heater if the condenser coolant either is not circulation or is too warm;
[Regulation 6.18, section 5.1.2.1]
 - (2) Spray safety switch to shut off the spray pump if the vapor level drops more than 4 inches below the bottom condenser coil in order to prevent spraying above the vapor level, and
[Regulation 6.18, section 5.1.2.2]
 - (3) Vapor level control thermostat to shut off the sump heater if the vapor zone rises above the design level, or
[Regulation 6.18, section 5.1.2.3]
 - (4) Equivalent safety systems as approved on a case-by-case basis by the District. [Regulation 6.18, section 5.1.2.4]
- iv. The open top vapor degreaser shall be equipped with a major control device; a refrigerated chiller. [Regulation 6.18, section 5.1.3.2]
- v. A permanent, conspicuous label summarizing the operating procedures specified in section 5.1.2 of Regulation 6.18, shall be installed on or near the open top vapor degreaser. [Regulation 6.18, section 5.1.4]
- vi. The cover shall be closed at all times except when processing workloads through the open top vapor degreaser. [Regulation 6.18, section 5.2.1]
- vii. Solvent carry-out shall be minimized by the following measures: [Regulation 6.18, section 5.2.2]
 - (1) Parts shall be racked to allow complete drainage,
[Regulation 6.18, section 5.2.2.1]

- (2) Parts shall be moved in and out of the open top vapor degreaser at a vertical speed of less than 11 ft/min, [Regulation 6.18, section 5.2.2.2]
 - (3) The work load shall be degreased in the vapor zone until condensation ceases, [Regulation 6.18, section 5.2.2.3]
 - (4) Any pools of solvent on the cleaned parts shall be tipped out before removal, and [Regulation 6.18, section 5.2.2.4]
 - (5) Parts shall be allowed to dry with the open top vapor degreaser above the vapor zone until visually dry. [Regulation 6.18, section 5.2.2.5]
- viii. Porous or absorbent materials such as cloth, leather, wood, or rope shall not be degreased. [Regulation 6.18, section 5.3]
 - ix. The work load shall not occupy more than half of the degreaser's open top area. [Regulation 6.18, section 5.4]
 - x. The vapor level shall not drop more than 4 inches when the work load enters or leaves the vapor level. [Regulation 6.18, section 5.5]
 - xi. Solvent shall not be sprayed above the vapor level. [Regulation 6.18, section 5.6]
 - xii. Any solvent leak shall either be repaired immediately, or the open top vapor degreaser shall be shut down until the leak is repaired. [Regulation 6.18, section 5.7]
 - xiii. Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the wasted solvent can evaporate. Waste solvent shall be stored only in closed containers. [Regulation 6.18, section 5.8]
 - xiv. The exhaust ventilation shall not exceed 65 cfm/sq ft of degreaser area unless necessary to meet OSHA requirements or control device requirements. Ventilation fans shall not be used near the degreaser opening. [Regulation 6.18, section 5.9]
 - xv. Water shall not be visually detectable in the solvent exiting the water separator. [Regulation 6.18, section 5.10]
 - xvi. The owner or operator shall operate and maintain the condenser at all times the vapor degreaser is in operation

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. VOC

- i. See Plantwide VOC Monitoring and Record Keeping requirements.
- ii. The owner or operator shall maintain monthly records that identify all periods of operation the vapor degreaser with the condenser offline. The records shall include summary information on the cause and duration of each offline event, calculations that show the emissions during each offline event, description of the corrective action take for each event and measures implemented to prevent recurrence of the situation that resulted in operating the vapor degreaser without the condenser in operating of the total volatile organic materials throughput for each operating day.
- iii. The owner or operator shall, monthly, perform and keep records of a visual inspection of the structural and mechanical integrity of the control devices for signs of damage, air leakage, corrosion, etc. and repair as needed.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. VOC

- i. See Plantwide VOC Reporting requirements.
- ii. Identification of all periods when the condenser was offline while the vapor degreaser was in operation, including the VOC emissions in lb./hr during each offline event;
- iii. Summary information on the cause and duration of each condenser offline event; and
- iv. Description of the corrective action taken for each offline event and measure implemented to prevent recurrence of the situation that resulted in operating the vapor degreaser while the condenser was not in operation.

Plant ID: 1216

U10 – Spray Coating Operation for Adhesive and Fire Retardant

Emission Unit U10: Spray Coating Operation for Adhesive and Fire Retardant**U10 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4 and 5

U10 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E37	One (1) spray coating operation for the application of adhesive and fire retardant to the interior of gun shields ¹⁷	2008	6.43, 7.08, 7.25	NA	S34

U10 Control Devices

Emission Point E37, is equipped with dry filters.

¹⁷ The adhesive is applied to metal parts and the fire-retardant is applied to non-metal parts. Since the adhesive does not contain any VOC or HAP, only the fire retardant contains VOC, this unit is subject to Regulation 7.25 only but not subject to Regulation 7.59. The adhesive and fire-retardant coatings do not contain any HAP.

U10 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

b. PM/PM₁₀

i. See Plantwide PM/PM₁₀ Standards.

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr per piece of equipment¹⁸. [Regulation 7.08, section 3.1.2]

c. VOC

i. See Plantwide VOC Standards.

ii. The owner or operator shall not allow or cause the total VOC emissions from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25 to exceed 5 tons during any consecutive 12-month period, unless a BACT evaluation is submitted and approved by the District¹⁹. [Regulation 7.25, section 2.1 and 3.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. Opacity

i. The owner or operator shall inspect the filters in the paint booth at least monthly to ensure proper installment [i.e. proper alignment/placement, gaps, etc.] and replace as needed.

¹⁸ Using the minimum spray gun transfer efficiency of 35%, the percent solids of the material of 65%, and the efficiency of the filters greater than 90%, the Regulation 7.08 PM emission limit cannot be exceeded uncontrolled.

¹⁹ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

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U10 – Spray Coating Operation for Adhesive and Fire Retardant

- ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.

b. PM/PM₁₀

- i. See Plantwide PM/PM₁₀ Monitoring and Record Keeping requirements.
- ii. See Monitoring and Record Keeping requirement for Opacity above.

c. VOC

- i. See Plantwide VOC Monitoring and Record Keeping requirements.
- ii. Notwithstanding the Plantwide Condition S2.c.i, an owner or operator of an affected facility subject to Regulation 7.25 shall maintain records that include the following: [Regulation 7.25, section 4.2]
 - (1) The quantity and VOC content of each coating applied during each calendar month;
 - (2) The VOC emissions during each calendar month and each consecutive 12-month period.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. Opacity

- i. The date, duration (including the start and stop time) of each time the filters are damaged or not operated while the process is in operation,
- ii. The number of filters damaged,
- iii. Corrective action taken, and
- iv. Summary information on the cause or reason for missing or damaged filters and measures implemented to prevent reoccurrence of the situation that damaged or missing filters.

b. PM/PM₁₀

- i. See Plantwide PM/PM₁₀ Reporting requirements.
- ii. See Reporting requirements for Opacity above.

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U10 – Spray Coating Operation for Adhesive and Fire Retardant

c. VOC

- i. See Plantwide VOC Reporting requirements.
- ii. For Regulation 7.25, the owner or operator shall report the 12-consecutive month VOC emissions for each month of the reporting period resulting from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25²⁰.

²⁰ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

Plant ID: 1216

U12 – Shot Blast Cabinets

Emission Unit U12: Shot Blast Cabinets**U12 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3

U12 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E39a	One (1) shot blast cabinet with aluminum oxide blast media, make Trinco, model DP850-PC, rated at 268 lb/hr, for surface preparation of miscellaneous metal parts, located inside building 51 (west wall)	2016	7.08	C39a	Exhausts inside building
E39b	One (1) aluminum oxide shot blast cabinet, make Vacublast, model MK 11-P, rated at 50 lb/hr, located in Building 117 east wall blast room	2008		C39b	
E39e	One (1) plastic shot blast cabinet, make Universal, model 72DDH-DC200, rated at 50 lb/hr, located at Hut 51 east wall	2008		C39e	
E43	One (1) blasting cabinet, make Cycloblast, model 4836-F, rated at 100 lb/hr, located in the north end of Building B	2010		C43	

U12 Control Devices

Control ID	Description	Control Efficiency
C39a	One (1) dust collector make Trinco, fan capacity 850 cfm	95%
C39b	One (1) dust collector	90%
C39e	One (1) dust collector	90%
C43	One (1) dust collector	90%

U12 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

See Plantwide HAP standards.

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

c. PM/PM₁₀

i. See Plantwide PM/PM₁₀ Standards.

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr from each shot blast cabinet²¹. [Regulation 7.08, section 3.1.2]

iii. The owner or operator shall operate and maintain the control devices C39a, C39b, C39e and C43 at all times the blast booths are in operation and shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. [Regulation 2.03, section 6.1 and Regulation 2.17]

iv. The owner or operator shall use control device filters that comply with all applicable standards and emissions limits. [Regulation 2.03, section 6.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. HAP

See Plantwide HAP Monitoring and Record Keeping requirements.

²¹ Using emission factors from AP-42, Table 13.2.6-1, blast cabinets E39b and E39e cannot exceed lb/hr PM emission standard under Regulation 7.08 uncontrolled.

b. Opacity²²

The owner or operator shall, monthly, perform and keep records of a visual inspection of the structural and mechanical integrity of the dust collectors for signs of damage, air leakage, corrosion, etc. and repair as needed.

c. PM/PM₁₀

- i. See Plantwide PM/PM₁₀ Monitoring and Record Keeping requirements.
- ii. See Monitoring and Record Keeping requirements for Opacity above.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

See Plantwide Reporting requirements.

b. Opacity

- i. The date, duration (including the start and stop time) of each time the filters are damaged or not operated while the process is in operation,
- ii. The number of filters damaged,
- iii. Corrective action taken, and
- iv. Summary information on the cause or reason for missing or damaged filters and measures implemented to prevent reoccurrence of the situation that damaged or missing filters.

c. PM/PM₁₀

- i. See Plantwide PM/PM₁₀ Reporting requirements.
- ii. See Reporting requirements for Opacity above.

²² Each blast cabinet has an exhaust inside the building, periodic visible emissions surveys are not required for each blast cabinet.

Plant ID: 1216

U16 – JBI Spray Booth

Emission Unit U16: JBI Spray Booth**U16 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4 and 5
7.59	Standards of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	1, 2, 3, 4, 6 and 7

U16 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E44	One (1) front air flow spray booth, make JBI, model T-25-WSB-S, for coating miscellaneous metal and non-metal parts	2010	6.43, 7.08, 7.25, 7.59	C50	S32

U16 Control Devices

Control ID	Description	Control Efficiency
C50	Dry mat filters, make Koch Filter Corporation, model Spray Stop S, or equivalent	98%

U16 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

See Plantwide HAP Standards.

b. Opacity

The owner or operator shall not allow visible emission to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

c. PM/PM₁₀

i. See Plantwide PM/PM₁₀ Standards.

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr²³. [Regulation 7.08, section 3.1.2]

d. VOC

i. See Plantwide VOC Standards.

ii. The owner or operator shall not allow or cause the total VOC emissions from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25 to exceed 5 tons during any consecutive 12-month period, unless a BACT evaluation is submitted and approved by the District²⁴. [Regulation 7.25, section 2.1 and 3.1]

iii. The owner or operator shall not allow or cause monthly average VOC emissions from the affected facility resulting from the coating of metallic surfaces in excess of the following^{25, 26}: [Regulation 7.59, section 2.1 and 3.1]

(1) 4.3 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for clear coatings.

²³ Using the minimum spray gun transfer efficiency of 35%, the percent solids of the material (~ 82%), the spray booth cannot be exceeded the PM lb/hr emission standards under Regulation 7.08 uncontrolled..

²⁴ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

²⁵ Plantwide equipment subject to Regulation 7.59: U1 E5, U1 E6, U1 E7, U16 E44, and U18 E47.

²⁶ Metal parts are wipe-cleaned before being coated. The wipe-down cleaners used for cleaning the metal parts are subject to Regulation 7.59.

- (2) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for air-dried coatings
- (3) 3.5 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for extreme performance coatings
- (4) 3.0 lb of VOC/gal of coatings, excluding water and exempt solvents, as applied for all other coatings.

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. HAP

See Plantwide HAP Monitoring and Record Keeping requirements.

b. Opacity

- i. The owner or operator shall inspect the filters in the paint booth at least monthly to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed.
- ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters if filters were replaced.

c. PM/PM₁₀

- i. See Plantwide PM/PM₁₀ Monitoring and Record Keeping requirements.
- ii. See Monitoring and Record Keeping requirements for Opacity above.

d. VOC

- i. See Plantwide VOC Monitoring and Record Keeping requirements.
- ii. Notwithstanding the Plantwide Condition S2.c.i, an owner or operator of an affected facility subject to Regulation 7.25 shall maintain records that include the following: [Regulation 7.25, section 4.2]
 - (1) The quantity and VOC content of each coating applied on a non-metal surface; and
 - (2) The VOC emissions during each calendar month and each consecutive 12-month period from the surface coating of non-metal surfaces.

- iii. Notwithstanding the Plantwide Condition S2.c.i, the owner or operator shall determine compliance with Regulation 7.59 based on a calendar month averaging period. [Regulation 7.59, section 3.2]
- iv. Notwithstanding the Plantwide Condition S2.c.i, an owner or operator of an affected facility subject to Regulation 7.59 shall maintain records that include the following: [Regulation 7.59, section 6.1]
 - (1) The regulation and section number applicable to the affected facility for which the records are being maintained,
 - (2) The application method and substrate type,
 - (3) The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvents (including exempt compounds) used at each point of application during the calendar month.
 - (4) The VOC content as applied in each coating and solvent,
 - (5) The date, or usage record period, for each application of coating and solvent,
 - (6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the calendar month.
- v. The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24. [Regulation 7.59, section 6.2]

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

See Plantwide HAP reporting requirements.

b. Opacity

There are no routine compliance reporting requirements for this pollutant.

c. PM/PM₁₀

See Plantwide PM/PM₁₀ Reporting requirements.

d. VOC

- i. See Plantwide VOC Reporting requirements.
- ii. For Regulation 7.25, the owner or operator shall report the 12-consecutive month VOC emissions for each month of the reporting period resulting from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25²⁷.
- iii. For Regulation 7.59, the owner or operator shall include the amount of coatings and solvents used and the VOC content of each material used during the calendar month each month of the reporting period.

²⁷ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

Emission Unit U17: Blast Booths**U17 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2 and 3.3

U17 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E12	One (1) blast booth, make Blast-It-All, model 122010, rated at 1,417 lb/hr that can use either glass bead, coal slag, or aluminum oxide blasting media for surface preparation of miscellaneous metal parts, located in Hut 51	2011	7.08	C2	S12
E42	One (1) blast booth, make JBI, model BE-25-WSB-S, rated at 1,850 lb/hr, that can use either coal slag or aluminum oxide blasting media for surface preparation of miscellaneous metal parts, located at the north end of Bldg. B	2010		C42	S31
E45	One (1) blast booth, make Hoffman, rated at 1,097 lb/hr, that can use either glass bead, coal slag, or aluminum oxide blasting media for surface preparation of miscellaneous metal parts, located at Hut 51	2011		C45	S33

U17 Control Devices

Control ID	Description	Control Efficiency²⁸
C2	One (1) dust collector controlling emissions from Blast-It-All blast booth (E12)	99.6%
C42	One (1) dust collector controlling emissions from JBI blast booth (E42), make JBI, model 60-10-3	99.7%
C45	One (1) baghouse controlling emissions from Hoffman blast booth (E45), make Donaldson Torit, model HDFT2-12	99.8%

²⁸ Control efficiencies for C2, C42 and C45 are based on stack test performed on April 5, 2011, June 14, 2011, and May 8, 2013 respectively.

U17 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

See Plantwide HAP Standards.

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

c. PM/PM₁₀

i. See Plantwide PM/PM₁₀ Standards.

ii. For the Blast-It-All blast booth (E12), the owner or operator shall not allow PM emissions to exceed 2.90 lb/hr. [Regulation 7.08, section 3.1.2]

iii. For the JBI blast booth (E42), the owner or operator shall not allow PM emissions to exceed 3.41 lb/hr. [Regulation 7.08, section 3.1.2]

iv. For the Hoffman blast booth (E45), the owner or operator shall not allow PM emissions to exceed 2.47 lb/hr. [Regulation 7.08, section 3.1.2]

v. At all times that each blast booth is in operation, the owner or operator shall operate and maintain the associated control device (C2, C42, and C45) and shall, to the extent practicable, maintain and operate the affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions²⁹. [Regulations 2.03, section 6.1, and 2.17]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

²⁹ Based on the latest stack tests conducted for Emission Points E12 (4/5/2011 (APCD-00029908)), E42 (6/14/2011 (APCD-00031276)), and E45 (5/8/2013 (APCD-00056151)), PM emissions can exceed the hourly emission limits uncontrolled. Therefore, the owner or operator is required to operate the control devices associated with these blast booths at all times the blast booths are in operation.

a. HAP

See Plantwide HAP Monitoring and Record Keeping requirements.

b. Opacity

- i. The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emissions points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 25 hours of the initial observation.
- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what, if any, corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.
- iv. The owner or operator shall, monthly, perform and keep records of a visual inspection of the structural and mechanical integrity of the dust collector for signs of damage, air leakage, corrosion, etc. and repair as needed.

c. PM/PM₁₀

- i. See Plantwide PM/PM₁₀ Monitoring and Record Keeping requirements.
- ii. Each day any blast booth is in operation, the owner or operator shall monitor and record the pressure drop across the associated dust collector (C2, C42, and C45) while the blast booth is in operation. The owner or operator shall take corrective action if the pressure drop across the dust collector is out of

the normal pressure drop range³⁰:

Control ID	Pressure Drop Range
C2	2.0" – 8.3" water column
C42	3.5"±2.0" water column
C45	1.0" - 6.0" water column

- iii. The owner or operator shall maintain records that identify if there is any time that a control device (C2, C42, or C45) is bypassed or not in operation while the associated blast booth (E12, E42, or E45) is in operation. The record shall include the following:
 - (1) The date and duration (including start and stop time);
 - (2) Identification of the control device and process equipment;
 - (3) PM/PM₁₀ emissions during the event in lb/hr;
 - (4) Summary information of the cause or reason for each event;
 - (5) Corrective action taken to minimize the extent and duration of each event; and
 - (6) Measures implemented to prevent reoccurrence of the situation that resulted in the event.
- iv. For Emission Point E45, the owner or operator shall use baghouse filters that comply with all applicable standards and emissions limits. [Agreed Board Order, 14-01 effective February 19, 2020]
- v. The owner or operator shall use control device filters that comply with all applicable standards and emissions limits. [Regulation 2.03, section 6.1]

³⁰ The normal pressure drops were measured during the most recent performance tests as follows. BAE Systems conducted the performance test for the Blast-It-All blast booth (E12) required by Construction Permit 29845-10-C(R1) on April 5, 2011. According to the test report received June 3, 2011, the uncontrolled and controlled PM emission rates are 118 lb/hr and 0.476 lb/hr, respectively; the uncontrolled and controlled Chromium VI emission rates are 3.04e^{-3} lb/hr and 1.56e^{-5} lb/hr, respectively. The performance test for the JBI blast booth (E42) required by Construction Permit 28-10-C was conducted on April 5, 2011 and June 14, 2011. According to the test report received September 13, 2011, the uncontrolled and controlled PM emission rates are 68.4 lb/hr and 0.17 lb/hr, respectively; the uncontrolled and controlled Chromium VI emission rates are 2.42e^{-4} lb/hr and 6.99e^{-7} lb/hr, respectively. For the Hoffman blast booth (E45), the performance test required by Construction Permit 31207-11-C was conducted on May 8, 2013. According to the test report received June 10, 2013, the uncontrolled and controlled PM emission rates are 78.164 lb/hr and 0.122 lb/hr; the uncontrolled and controlled Chromium VI emission rates are 0.0011 lb/hr and 1.90e^{-6} lb/hr.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

See Plantwide HAP Reporting requirements.

b. Opacity

- i. The date, time and results of each visible emissions survey conducted that resulted in visible emissions being observed. If no visible emissions were observed during the reporting period, the owner or operator may submit a negative declaration.
- ii. The date, time and results of each Method 9 test conducted. If there were no Method 9 tests performed during the reporting, the owner or operator may submit a negative declaration.
- iii. Description of any corrective action taken for each exceedance of the opacity standard.

c. PM/PM₁₀

- i. See Plantwide PM/PM₁₀ Reporting requirements.
- ii. The owner or operator shall report the following regarding control device C2, C42, and C45 operating conditions:
 - (1) Any deviation from the requirement to maintain the pressure drop across the control device at the normal pressure drop range; and
 - (2) Description of any corrective action taken for each deviation.
- iii. The owner or operator shall report the following information if there is any time that control device C2, C42, or C45 is bypassed or not in operation when the associated process is operating.
 - (1) Number of events;
 - (2) Duration of each event; and
 - (3) Calculated pound per hour PM/PM₁₀ emissions for each event.

S4. Testing

[Regulation 2.17, section 5.2]

a. PM/PM10

- i. For the EU U17 control devices C2, C42, and C45, the owner or operator shall conduct an EPA Test Method 5 stack test on the inlet and the outlet of each control device once within 2 years from the permit effective date. All testing shall be conducted at +/- 10% of the maximum production rates on the outlet of the control device or emission point. Each stack test shall consist of three 1-hr test runs.
- ii. The owner or operator shall submit a written compliance test plan that includes the EPA test methods that will be used for PM compliance testing, the process operating parameters (e.g. material throughput, in lbs, material type, etc.) that will be monitored during the compliance test, and the control device performance indicators (e.g. pressure drop) that will be monitored during the compliance test. (See Appendix A.) The compliance test plan shall be furnished to the District at least 30 days before the actual date of the compliance test.
- iii. The owner or operator shall provide the District at least 10 days prior notice of any compliance test to afford the District the opportunity to have an observer present.
- iv. The owner or operator shall furnish the District with a written report of the results of the compliance test within 60 days following the actual date of completion of the compliance test event.

Insignificant Activities

Equipment	Qty.	PTE (tpy)	Regulation Basis
Welding machines and soldering located in Building A, B, C and Weld School (EU IA6)	various	0.49 PM ₁₀	Regulation 1.02, Appendix A, section 3.4
One (1) storage tank with 4,000 gal capacity storing mechanic oil having vapor pressure < 10 mmHg (EU IA1) ³¹	1	0.24 VOC	Regulation 1.02, Appendix A, section 3.9.2
Five (5) Cold solvent parts cleaners equipped with secondary reservoirs (See EU IA2)	5	0.44 VOC	Regulation 1.02, Appendix A, section 3.22
IE18 – Syntactic foam injection process IE19 – Foam filling component cavities with polyurethane mixture IE20 – Proximity switch manufacture IE21 – Miscellaneous application of adhesive and sealant (See EU IA3)	1	0.52 VOC	Regulation 1.02, section 1.38.1.2.1
Emergency generators (See EU IA4 and EU IA7) with three (3) diesel tanks	3	2.59 NO _x	Regulation 1.02, section 1.38.1.2.1
Fifty (50) heaters and air make up units using natural gas and one (1) natural gas boiler, capacity < 10 mmBTU/hr (See EU IA5)	50	1.79 NO _x (for highest single unit)	Regulation 1.02, Appendix A, sections 1.1 and 1.2
Wood working equipment	3	0.03 each PM ₁₀	Regulation 1.02, Appendix A, section 3.5
Potting oven	1	0 VOC	Regulation 1.02, section 1.38.1.2.1
Laboratory vent	4	0 VOC	Regulation 1.02, Appendix A, section 3.11
Diesel storage tank, 150 gallons ³²	1	2.09 x 10 ⁻⁵ VOC	Regulation 1.02, Appendix A, section 3.24
Metal working equipment	15	0.00153 PM ₁₀	Regulation 1.02, section 1.38.1.2.1
Oil water separator and water evaporator	1	0.02 VOC	

³¹ The specific conditions for the 4000 gallon machining oil storage tank (IE1) were removed, as the vapor pressure of this material is less than 0.1 psia.

³² This tank was converted from unleaded gasoline to diesel on May 27, 2020.

Equipment	Qty.	PTE (tpy)	Regulation Basis
Touch-up painting ³³	1	0.07 VOC	Regulation 1.02, section 1.38.1.2.1
Hand cleaning of parts	1	2.84 VOC	
Arc gouging	6	1.1 PM ₁₀	
Non-destructive testing reservoirs (Magnaflux)	2	0.49 tpy VOC	
Cooling Sumps	34	1.16 tpy VOC	
Detergent Cleaning	1	0.02 PM ₁₀	

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
3. The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.
4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
5. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.
6. The District has determined that no monitoring, recordkeeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

³³ Touch-up painting is typically conducted on parts that have been previously coated in EU U1 and are subject to Regulation 7.59.

Plant ID: 1216

IA2 – Parts Washers

Emission Unit IA2: Parts Washers with Secondary Reservoirs**IA2 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.18	Standards of Performance for Solvent metal Cleaning Equipment	1 through 6
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19

IA2 Equipment

Emission Point	Description	Applicable Regulations	Control ID	Release ID
IE9 through IE13	Five (5) parts washers each equipped with a secondary reservoir	6.18, 6.43	NA	NA

IA2 Control Devices

There are no control devices associated with this unit.

Emission Unit IA2 Specific Conditions**S1. Standards**

[Regulation 2.17, section 5.1]

a. VOC

- i. See Plantwide VOC Standards.
- ii. The owner or operator shall install, maintain, and operate the control equipment as follows: [Regulation 6.18, section 4]
 - (1) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. [Regulation 6.18, section 4.1.1]
 - (2) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. [Regulation 6.18, section 4.1.2]
 - (3) A permanent, conspicuous label summarizing the operating requirements specified in Specific Condition S1.b. shall be installed on or near the cold cleaner. [Regulation 6.18, section 4.1.3]
 - (4) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. [Regulation 6.18, section 4.1.4]
 - (5) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. [Regulation 6.18, section 4.1.6]
 - (6) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. [Regulation 6.18, section 4.1.8]
- iii. The owner or operator shall observe at all times the following operating requirements: [Regulation 6.18, section 4.2]
 - (1) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste

solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. [Regulation 6.18, section 4.2.1]

- (2) The solvent level in the cold cleaner shall not exceed the fill line. [Regulation 6.18, section 4.2.2]
 - (3) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. [Regulation 6.18, section 4.2.3]
 - (4) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. [Regulation 6.18, section 4.2.4]
 - (5) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. [Regulation 6.18, section 4.2.5]
 - (6) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. [Regulation 6.18, section 4.2.6]
 - (7) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. [Regulation 6.18, section 4.2.7]
- iv. The owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). [Regulation 6.18, section 4.3.2]

S2. Monitoring and Record Keeping

[Regulation 2.17, sections 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. VOC

- i. See Plantwide VOC Monitoring and Record Keeping requirements.
- ii. The owner or operator shall maintain records that include the following for each purchase: [Regulation 6.18, section 4.4.2]
 - (1) The name and address of the solvent supplier,

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IA2 – Parts Washers

- (2) The date of the purchase,
- (3) The type of the solvent, and
- (4) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

S3. Reporting

[Regulation 2.17, section 5.2]

a. VOC

See Plantwide VOC Reporting requirements.

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IA3 – Minor VOCs

Emission Unit IA3: Minor VOC Emission Unit**IA3 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4, & 5

IA3 Equipment³⁴

Emission Point	Description	Applicable Regulations	Control ID	Release ID
IE18	One (1) Syntactic foam injection process	6.43, 7.25	NA	NA
IE19	One (1) Foam filling component cavities with polyurethane mixture			
IE20	One (1) Proximity switch manufacture			
IE21	One (1) Miscellaneous application of adhesive and sealant			

IA3 Control Devices

There are no control devices associated with this unit.

³⁴ The equipment under this unit meets the definition of insignificant activities per Regulation 1.02, section 1.38.1.2.1. However, the source is subject to a plantwide 5 tons per 12-month limit per Regulation 7.25.

Emission Unit IA3 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. VOC

- i. See Plantwide VOC Standards.
- ii. The owner or operator shall not allow or cause the total VOC emissions from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25 to exceed 5 tons during any consecutive 12-month period, unless a BACT evaluation is submitted and approved by the District³⁵.
[Regulation 7.25, section 2.1 and 3.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, sections 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. VOC

- i. See Plantwide VOC Monitoring and Record Keeping requirements.
- ii. An owner or operator of an affected facility subject to Regulation 7.25 shall maintain records that include the following: [Regulation 7.25, section 4.2]
 - (1) The quantity and VOC content of each coating applied on a non-metal surface; and
 - (2) The VOC emissions during each calendar month and each consecutive 12-month period from the surface coating of non-metal surfaces.

S3. Reporting

[Regulation 2.17, section 5.2]

a. VOC

- i. See Plantwide VOC Reporting requirements.

³⁵ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

- ii. For Regulation 7.25, the owner or operator shall report the 12-consecutive month VOC emissions for each month of the reporting period resulting from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25³⁶.

³⁶ The non-metal parts surface coating operation is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

Plant ID: 1216

IA4 – Emergency Generators

Emission Unit IA4: Emergency Generators**IA4 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
40 CFR 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	§63.6603, §63.6604, §63.6605, §63.6625, §63.6640, §63.6645, and §63.6655

IA4 Equipment

Emission Point	Description	Applicable Regulations	Control ID	Release ID
IE22	One (1) diesel fueled emergency generator, installed in 1998, rated at 120HP, make Onan, model 60DGCBNE, for emergency lighting in buildings	6.43, 40 CFR 63 Subpart ZZZZ	NA	NA
IE23	One (1) diesel fueled emergency generator, installed in 1997, rated at 142HP, make KOHLER, model EG-AS, for back-up to IT servers in Building 96			

IA4 Control Devices

There are no control devices associated with this unit.

Emission Unit IA4 Specific Conditions**S1. Standards**

[Regulation 2.17, section 5.1]

a. HAP

- i. For an existing stationary CI RICE located at an area source of HAP emissions, the owner or operator shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. [40 CFR 63.6595(a)(1)]
- ii. The owner or operator of an existing stationary RICE located at an area source of HAP emissions shall comply with the requirements Table 2(d) to 40 CFR 63 subpart ZZZZ as follows³⁷: [40 CFR 63.6603(a)]
 - (1) The owner or operator shall change the oil and filter every 500 hours of operation or annually, whichever comes first. The owner or operator has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ. [40 CFR 63, Subpart ZZZZ, Table 2d (4)(a)]
 - (2) The owner or operator shall inspect the air cleaners every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63, Subpart ZZZZ, Table 2d (4)(b)]
 - (3) The owner or operator shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63, Subpart ZZZZ, Table 2d (4)(c)]
- iii. The owner or operator shall use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [40 CFR 63.6604(b)]
 - (1) Sulfur content: 15 parts per million (ppm) maximum for NR diesel fuel. [40 CFR 80.510(b)(1)(i)]
 - (2) A minimum cetane index of 40; or [40 CFR 80.510(b)(2)(i)]

³⁷ If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63, Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ, Footnote 2 of Table 2d]

- (3) A maximum aromatic content of 35 volume percent.
[40 CFR 80.510(b)(2)(ii)]
- iv. General requirements for complying with 40 CFR 63, Subpart ZZZZ:
 - (1) The owner or operator shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to the RICE at all times. [40 CFR 63.6605(a)]
 - (2) At all times the owner or operator shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- v. The owner or operator shall demonstrate continuous compliance with each emission limitation, operating limitation, and other applicable requirements in Tables 2d to 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6640(a)]
- vi. The owner or operator shall report each instance in which you did not meet each emission limitation or operating limitation in Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. [40 CFR 63.6640(b)]
- vii. The owner or operator shall operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If the owner or operator does not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63

Subpart ZZZZ and must meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]

- (1) There is no time limit on the use of the emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
- (2) The owner or operator may operate the emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(4) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). [40 CFR 63.6640(f)(2)]
 - (a) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 63.6640(f)(2)(i)]
 - (b) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(4)]

b. VOC

See Plantwide VOC Standards.

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. HAP

- i. Monitoring, installation, collection, operation, and maintenance requirements: [40 CFR 63.6625]
 - (1) The owner or operator shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]
 - (2) The owner or operator shall install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]
 - (3) The owner or operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup. [40 CFR 63.6625(h)]
 - (4) The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c to 40 CFR 63, Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c to 40 CFR 63, Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]
- ii. Recordkeeping requirements: [40 CFR 63.6655]
 - (1) The owner or operator shall keep the following records that apply to your RICE: [40 CFR 63.6655(a)]

- (a) A copy of each notification and report that you submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
 - (b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
 - (c) Records of performance tests (if stack test is required) and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.6655(a)(3)]
 - (d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
 - (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
- (2) The owner or operator shall keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to the RICE. [40 CFR 63.6655(d)]
 - (3) The owner or operator shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan. [40 CFR 63.6655(e)]
 - (4) The owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]

b. VOC

See Plantwide VOC Monitoring and Record Keeping requirements.

Plant ID: 1216

IA4 – Emergency Generators

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

There are no routine compliance reporting requirements for this pollutant³⁸.

b. VOC

See Plantwide VOC Reporting requirements.

³⁸ Reporting requirements in Table 7(4) of 40 CFR 63, Subpart ZZZZ are not applicable to the emergency generators (IE 22 and IE23) under this emission unit. That is because of IE22 and IE23 do not operate for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or in §63.6640(f)(4)(ii).

Plant ID: 1216

UIA5 – Natural Gas

Emission Unit IA5: Natural Gas Boiler and Space Heaters**IA5 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
7.06	Standards of Performance for New Indirect Heat Exchangers	1, 2, 3, 4.1.3, 4.2, 5.1.1 and 8

IA5 Equipment

Emission Point	Description	Applicable Regulations	Control ID	Release ID
IE41	Three (3) Hastings Heaters, heat input capacity of 1.5 MMBtu/hr per unit, installed in 1989	6.43, 7.06	NA	NA
IE42	Wisconsin Heat Treat Oven - B Bldg, heat input capacity of 1.8 MMBtu/hr, installed in 2001			
IE43	Greenheck Make-up Air Unit w Heat, heat input capacity of 4.2 MMBtu/hr, installed in 2010			
IE44	Thermocycler Heaters GTR-9600, heat input capacity of 1.8 MMBtu/hr, installed in 2015			
IE45	Hut 51 Makeup Air Unit, heat input capacity of 4.1 MMBtu/hr, installed in 2015			
IE46	One (1) natural gas-fueled boiler, heat input capacity 2.048 MMBtu/hr, installed in 1989			

IA5 Control Devices

There are no control devices associated with this unit.

Emission Unit IA5 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

See Plantwide HAP Standards.

b. Opacity

The owner or operator shall not cause to be discharged into the atmosphere from the affected facility particulate matter emissions which exhibit greater than 20% opacity³⁹. [Regulation 7.06, section 4.2]

c. PM/PM₁₀

i. See Plantwide PM/PM₁₀ Standards⁴⁰.

ii. For Emission Point IE41, IE42, and IE43, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of in excess of 0.56 pounds per million BTU actual total heat input. [Regulation 7.06, section 4.1.3]

iii. For Emission Point IE44, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of in excess of 0.50 pounds per million BTU actual total heat input. [Regulation 7.06, section 4.1.3]

iv. For Emission Point IE45 and IE46, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of in excess of 0.40 pounds per million BTU actual total heat input. [Regulation 7.06, section 4.1.3]

d. SO₂

The owner or operator shall not cause to be discharged into the atmosphere from the affected facility and gases which contain sulfur dioxide in excess of 1.0 pounds per million BTU actual total heat input⁴¹. [Regulation 7.06, section 5.1.1]

e. VOC

See Plantwide VOC Standards.

³⁹ Using a natural gas fired boiler should inherently meet the 20% opacity standard.

⁴⁰ Regulation 7.06 only applies to the units with a heat input capacity greater than 1.0 MMBTU/hr.

⁴¹ Using AP-42 emission factors and combusting natural gas, the PM and SO₂ emission standards cannot be exceeded.

S2. Monitoring and Record Keeping

[Regulation 2.17, sections 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. HAP

See Plantwide HAP Monitoring and Record Keeping requirements.

b. Opacity

There are no monitoring and record keeping requirements for this pollutant.

c. PM/PM₁₀

See Plantwide PM/PM₁₀ Monitoring and Record Keeping requirements.

d. SO₂

There are no monitoring and record keeping requirements for this pollutant.

e. VOC

See Plantwide VOC Monitoring and Record Keeping requirements.

S3. Reporting

[Regulation 2.17, section 5.2]

a. HAP

See Plantwide HAP Reporting requirements.

b. Opacity

There are no routine compliance reporting requirements for this pollutant.

c. PM/PM₁₀

See Plantwide PM/PM₁₀ Reporting requirements.

d. SO₂

There are no routine compliance reporting requirements for this pollutant.

e. VOC

See Plantwide VOC Reporting requirements.

Plant ID: 1216

UIA6 – Welding and Soldering

Emission Unit IA6: Welding and Soldering**UIA6 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, 3.2, and 3.3
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4, & 5

IA6 Equipment

Emission Point	Description	Applicable Regulations	Control ID	Release ID
E49	Various welding machines and soldering equipment located in Building A, B, C and Weld School	7.08, 7.25	NA	NA

IA6 Control Devices

There are no control devices associated with this unit.

IA6 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

See Plantwide HAP Standards.

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity from each piece of equipment. [Regulation 7.08, section 3.1.1]

c. PM/PM₁₀

i. See Plantwide PM/PM₁₀ Standards.

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr from each piece of equipment⁴². [Regulation 7.08, section 3.1.2]

d. VOC

i. See Plantwide VOC Standards.

ii. The owner or operator shall not allow or cause the total VOC emissions from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25 to exceed 5 tons during any consecutive 12-month period, unless a BACT evaluation is submitted and approved by the District⁴³. [Regulation 7.25, section 2.1 and 3.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. HAP

See Plantwide HAP Monitoring and Record Keeping requirements.

⁴² Using emission factors from AP-42, Table 12.19-1, the source cannot exceed the hourly PM emission standards uncontrolled.

⁴³ The welding and soldering equipment is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

b. Opacity

There are no monitoring and record keeping requirements for this pollutant.

c. PM/PM₁₀

See Plantwide PM/PM₁₀ Monitoring and Record Keeping requirements.

d. VOC

i. See Plantwide VOC Monitoring and Record Keeping requirements.

ii. Notwithstanding the Plantwide Condition S2.c.i, an owner or operator of an affected facility subject to Regulation 7.25 shall maintain records that include the following: [Regulation 7.25, section 4.1]

(1) The quantity of flux used and VOC content.

(2) The VOC emissions during each calendar month and each consecutive 12-month period

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. HAP

See Plantwide HAP Reporting requirements.

b. Opacity

There are no routine compliance reporting requirements for this pollutant.

c. PM/PM₁₀

See Plantwide PM/PM₁₀ Reporting requirements.

d. VOC

For Regulation 7.25, the owner or operator shall report the 12-consecutive month VOC emissions for each month of the reporting period resulting from U1 E5, U1 E6, U1 E7, U3 PE5, U5 E32, U10 E37, U16 E44, IA3 IE18, IA3 IE19, IA3 IE20, IA3 IE21, and IA6 E49, subject to Regulation 7.25⁴⁴.

⁴⁴ The welding and soldering equipment is subject to Regulation 7.25. The 5 tpy standard required by Regulation 7.25 only applies to non-metal parts coating operations and other units subject to Regulation 7.25.

Plant ID: 1216

UIA7 – New Emergency Generator

Emission Unit IA7: New Emergency Generator**IA7 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, 19
40 CFR 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	60.4205(b), 60.4202(f)
40 CFR 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	60.4207(b), 60.4211(c), 60.4211(f)

IA7 Equipment

Emission Point	Description	Applicable Regulations	Control ID	Release ID
VPMGen	One (1) diesel-fueled emergency generator, installed in 2021, rated at 422 hp (275 kW)	6.43, 40 CFR 63 Subpart ZZZZ, 40 CFR 60 Subpart IIII	NA	NA

IA7 Control Devices

There are no control devices associated with this unit.

Emission Unit IA7 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. Fuel Requirements

- i. The owner or operator of a stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder that uses diesel fuel shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted: [40 CFR 60.4207(b)]
 - (1) Sulfur content: 15 parts per million (ppm) maximum for NR diesel fuel. [40 CFR 80.510(b)(1)(i)]
 - (2) A minimum cetane index of 40; or [40 CFR 80.510(b)(2)(i)]
 - (3) A maximum aromatic content of 35 volume percent. [40 CFR 80.510(b)(2)(ii)]

b. Unit Operation⁴⁵

- i. The owner or operator of 2007 model year or later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [40 CFR 60.4205(b)]
- ii. Engine manufacturers shall certify the engines with the exhaust emission standards in the following table. In lieu of the NO_x standards, NMHC + NO_x standards, and PM standards, manufacturers may elect to include engine families in the averaging, banking, and trading program. The manufacturer must set a family emission limit (FEL) not to exceed the levels contained in the following table:
[40 CFR 60.4202(a)(2) refers to 40 CFR 89.112]

⁴⁵ Generator EP VPMGen is subject to 40 CFR 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, because they are stationary reciprocating internal combustion engines (RICE) located at an area source of HAP emissions. Per 40 CFR 63.6590(c), this generator meets the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII. No further requirements apply for such engines under 40 CFR 63 Subpart ZZZZ.

Table 1 to 40 CFR 89 Subpart B Section 89.112(a) and Table 2 to 40 CFR 89 Subpart B Section 89.112(b)

Engine Capacity: 275 kW	Emission Standards (g/KW-hr)				
	NO _x	HC	NMHC+ NO _x	CO	PM
Emission Standards (Table 1 to 40 CFR 89.112(a))	NA	NA	4.0	3.5	0.20
Family Emission Limits (Table 2 to 40 CFR 89.112(d))	NA	NA	6.4	NA	0.54

- iii. The owner or operator must operate and maintain stationary CI ICE that achieves the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]
- iv. The owner or operator that is required comply with the emission standards specified in 40 CFR 60 Subpart IIII shall do all of the following:
[40 CFR 60.4211(a)]
 - (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
 - (2) Change only those emission-related settings that are permitted by the manufacturer; [40 CFR 60.4211(a)(2)]
- v. The owner or operator shall purchase an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(c)]
- vi. In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of 40 CFR 60 Subpart IIII, is prohibited. If the owner or operator does not operate the engine according to the requirements below, the engine will not be considered an emergency engine under 40 CFR 60 Subpart IIII and shall meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
 - (2) The owner or operator may operate the emergency stationary ICE for any combination of the purposes specified in 60 CFR 60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 60 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph. [40 CFR 60.4211(f)(2)].

- (a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2)(i)]
 - (b) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [40 CFR 60.4211(f)(2)(iii)]
- vii. For stationary CI internal combustion engines greater than 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emissions-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g)(2)]

c. VOC

See Plantwide VOC Standards.

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request, as required by General Condition G6.

a. Fuel Requirements

The owner or operator shall maintain records of the fuel SDS sheets and receipts showing dates, amounts of fuel purchased, sulfur content of fuel purchased and supplier's name and address. [Regulation 2.17, section 5.2]

b. Unit Operation

- i. The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines shall install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]
- ii. The owner or operator is not required to submit an initial notification. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

c. VOC

See Plantwide VOC Monitoring and Record Keeping requirements.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition 12:

a. Fuel Requirements

There are no reporting requirements for this equipment.

b. Unit Operation

There are no reporting requirements for this equipment except for the initial notification requirements of 40 CFR 63.6645(f).

c. VOC

See Plantwide VOC Reporting requirements.

Attachment A - Protocol Checklist for a Performance Test

A complete protocol must include the following information

1. Facility name, location, and Plant ID number.
2. Responsible Official and environmental contact names.
3. Permit numbers that are requiring the test to be conducted.
4. Test methods to be used (*i.e.* EPA Method 1, 2, 3, 4, and 5).
5. Alternative test methods or description of modifications to the test methods to be used.
6. Purpose of the test including equipment and pollutant to be tested. (The purpose may be described in the permit that requires the test to be conducted or it may be to show compliance with a federal regulation or emission standard.)
7. Tentative test dates. (These may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation.)
8. Maximum rated production capacity of the system.
9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits) and justification of the planned production rate, if less than the maximum rate.
10. Method to be used for determining rate of production during the performance test;
11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance.
12. Description of normal operation cycles, if applicable.
13. Discussion of operating conditions that tend to cause worse case emissions. This is especially important to clarify if worst case emissions do not result from the maximum production rate.
14. Process flow diagram.
15. The type and manufacturer of the control equipment, if any.
16. The process and/or control equipment parameters to be monitored and recorded during the performance test. These parameters may include pressure drops, flow rates, pH, temperature, *etc.* The values achieved during the test may be required during subsequent operations to describe the operating parameters that are indicative of good operating performance.
17. How quality assurance and accuracy of the data will be maintained, including sample identification and chain-of-custody procedures, audit sample provider, and number of audit samples to be used, if applicable.
18. Diameter of the pipe, duct, stack, or flue to be tested.
19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet.
20. The number of traverse points to be tested for the outlet and the inlet if required, using Appendix A-1 to 40 CFR Part 60.

**The Stack Test Review fee must be submitted with each stack test protocol.
The current fee is listed on the APCD website (louisvilleky.gov/APCD)**

Attachment B - Emission Factors, Calculation Methodologies, & Stack Tests

Generally, emissions are calculated by multiplying the throughput (ton, MMCF, gallons, etc.) or hours of operation of the equipment by the appropriate emission factor and accounting for any control devices unless otherwise approved in writing by the District.

Table 1: Emission Units U1, Paint booth for coating metal and non-metal parts, U10, Spray coating operation for adhesive and fire retardant, U16, JBI spray booth for coating miscellaneous

EU	Emission Point	Description	Emission Factor
U1	E5	One (1) large JBI paint booth at Building C, make King Heating & Cooling	Material balance from paint and coating materials amount used and VOC, PM and HAP contents from SDSs
	E6	One (1) medium JBI paint booth at Building C, make King Heating & Cooling	
	E7	One (1) small JBI paint booth at Building C, make King Heating & Cooling	
U10	E37	One (1) coating application for adhesive and fire-retardant coatings on miscellaneous metal and non-metal parts	
U16	E44	One (1) front air flow spray booth, make JBI, WSB-S	

Table 2: Emission Unit U3, Plating shop

Emission Point	Description	Emission Factor
PE1	Four (4) tanks with acid exhaust	PM and chromium emissions based on stack tests performed February 1996, April 2009, and September 2019 or most recent stack test. All other HAPs based on site-specific emission factors
PE2	Seven (7) tanks with alkaline exhaust	
PE3	Ten (10) tanks with alkaline exhaust	
PE4	Three (3) tanks with alkaline exhaust	
PE5	Three (3) tanks with alkaline exhaust	
PE6	Fifteen (15) tanks with acid exhaust with chromium	
PE7	Ten (10) tanks with acid exhaust with chromium	
PE8	Thirteen (13) tanks with acid exhaust	
PE9	Ten (10) tanks with cyanide exhaust	
PE10	Fourteen (14) tanks with alkaline exhaust	
PE11	Five (5) tanks with chromium exhaust	
PE12	Nine (9) tanks with acid exhaust	
PE13	Fifty-six (56) rinse tanks	

Table 3: Emission Unit U5, Fiberglass repair application

Emission Point	Description	Emission Factor
E32	One (1) fiberglass repair application	Material balance from fiberglass repair materials amount used and VOC and HAP contents from SDSs

Table 4: Emission Units U6, Cold solvent parts cleaners without Secondary reservoirs, U8, Vapor Degreaser with Refrigerated Condenser

EU	Emission Point	Description	Emission factor
U6	E33a	One (1) cold solvent parts cleaners without secondary reservoirs	Part washer emission equation or material balance (VOC): $q = A \left(\frac{P_a * Mw}{R * T} \right) \left(\frac{D_i}{Z_2 - Z_1} \right) \ln \left(\frac{1}{1 - Y_{ci}} \right) EM$
	E33f	One (1) cold solvent parts cleaners without secondary reservoirs	
IA2	IE9 through IE 13	Five (5) parts washers each equipped with a secondary reservoir	
U8	E35	One (1) 30 gallon vapor degreaser with refrigerated condenser for cleaning metal parts, make Branson, model WSD-1216W, capacity 22 gallons	AP-42 Table 4.6-2

Table 5: Emission Units U12, Shot blast cabinet, U17, Blast booths

EU	Emission Point	Description	Emission factor
U12	E39a	One (1) shot blast cabinet with aluminum oxide blast media, make Trinco, model DP850-PC, rated at 268 lb/hr	AP-42, Table 13.2.6-1, HAPs based on latest blast dust sample
	E39b	One (1) aluminum oxide shot blast cabinet, make Vacublast, model MK 11-P, rated at 50 lb/hr	
	E39e	One (1) plastic shot blast cabinet, make Universal, model 72DDH-DC200, rated at 50 lb/hr,	
	E43	One (1) blasting cabinet, make Cycloblast, model 4836-F, rated at 100 lb/hr	
U17	E12	One (1) blast booth, make Blast-It-All, model 122010, rated at 1,417 lb/hr with glass bead, coal slag, or aluminum oxide blasting	PM/PM ₁₀ and chromium based on stack test performed April 5, 2011 or most recent stack test; additional HAP emission factors based on latest blast dust sample

EU	Emission Point	Description	Emission factor
	E42	One (1) blast booth, make JBI, model BE-25-WSB-S, rated at 1,850 lb/hr, with coal slag or aluminum oxide blasting media	PM/PM ₁₀ and chromium based on stack test performed June 14, 2011 or most recent stack test; additional HAP emission factors based on latest blast dust sample
	E45	One (1) blast booth, make Hoffman, rated at 1,097 lb/hr, with glass bead, coal slag, or aluminum oxide blasting media	PM/PM ₁₀ and chromium based on stack test performed May 08, 2014 or most recent stack test; additional HAP emission factors based on latest blast dust sample

Table 6: Emission Units IA1, Storage tanks, IA3, Minor VOCs, IA4, Emergency Generators, IA5, Natural Gas Boiler and Space Heaters, IA6, Welding

EU	Emission Point	Description	Emission Factor
IA1	IE1	Storage tank	Mass balance from SDSs for all stored materials
IA3	IE18 through IE21	Minor VOC emission unit	Mass balance from SDSs for all stored materials
IA4 and IA7	IE22, IE23, VPMGen	Three (3) diesel-fuel emergency generators	AP-42, Tables 3.3-1 and 3.3-2
IA5	IE38	Forty-nine (49) natural gas-fueled heating and/or air make-up units	AP-42, Tables 1.4-1, 1.4-2, 1.4-3 and 1.4-4
	IE46	One natural gas-fueled boiler, heat input capacity, 2.048 MMBtu/hr	
IA6	E49	Various welding machines and soldering equipment located in Building A, B, C and Weld School	Mass balance from welding rod materials, amount used, and material contents obtained from SDSs